

Big Maths Beat That!: Teacher Notes

| SAFE Challenge 12 | | | |
|-------------------|--|----------|--|
| | Step Location in the SAFE framework | | Title of Step |
| | Progress Drive | Step No. | |
| Q1 | Amounts: Amounts of Time | 22 | I know how many days in each month, year and leap year |
| Q2 | Amounts: Amounts of Time: Telling the Time | 9 | I can say how long until o'clock |
| Q3 | Amounts: Amounts of Time: Telling the Time | 11 | I can tell the time to the nearest minute |
| Q4 | Amounts: Amounts of Time: Telling the Time | 15 | I can convert time from analogue to 24-hour clock |
| Q5 | Amounts: Amounts of Turn | 13 | I can use acute and obtuse to accurately describe properties of shapes |
| Q6 | Fractions: Fractions of a Whole | 14 | I know any fraction equal to 1 |
| Q7 | Fractions: Fractions of a Set | 9 | I can find fractions of amounts using my tables (1 part) |
| Q8 | Fractions: Fractions of a Set | 10 | I can find fractions of amounts using my tables (2 or more parts) |
| Q9 | Fractions: Fractions: Calculation | 2 | I can solve addition calculations with fractions |
| | | 3 | I can solve subtraction calculations with fractions |
| Q10 | Dangerous Maths: Algebra | 4 | I can use a two-step function machine |

NAME:

CLASS:

DATE:

SAFE 12

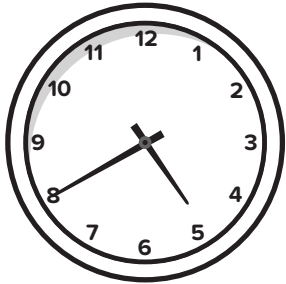
WK: 1

/10

1

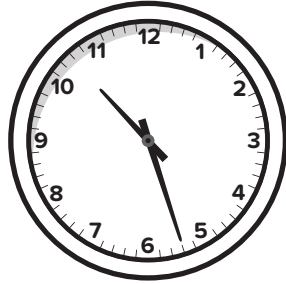
How many days are in January? _____ days

2



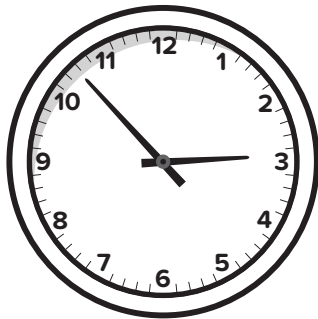
- 5 to 5
- 20 past 8
- 20 to 5

3



Write this time on the digital clock

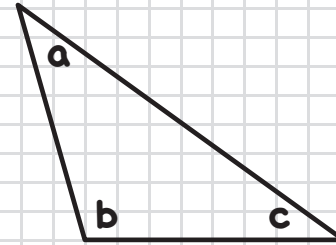
4



PM

Write this time on the digital clock using 24 hour notation

5



Which angle is obtuse?

6

Which fraction is equal to 1?

- $\frac{4}{5}$ $\frac{11}{11}$ $\frac{11}{10}$

7

$\frac{1}{4}$ of 24 =

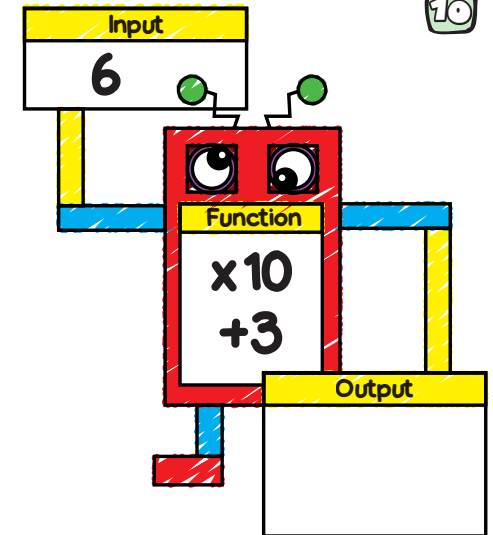
8

$\frac{3}{4}$ of 24 =

9

$\frac{3}{8} + 4 + \frac{2}{8} =$

10



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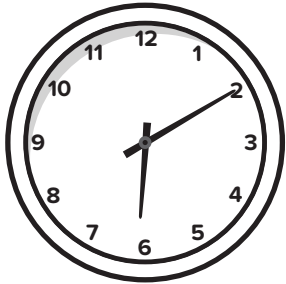
WK: 2

/10

1

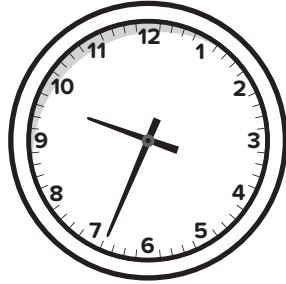
How many days are in March? _____ days

2



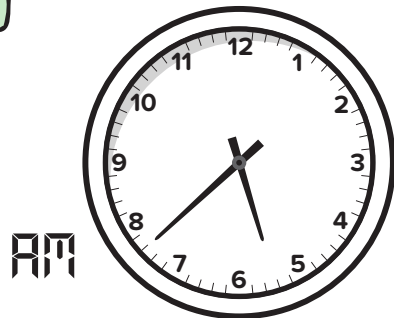
- 10 to 2
- 10 past 6
- 15 to 4

3



Write this time on the digital clock

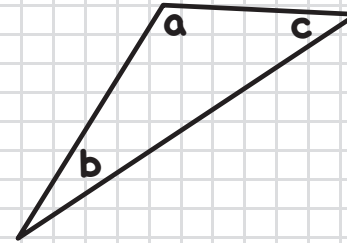
4



AM

Write this time on the digital clock using 24 hour notation

5



Which angle is obtuse?

6

Which fraction is equal to 1?

- $\frac{6}{7}$ $\frac{5}{8}$ $\frac{9}{9}$

7

$\frac{1}{3}$ of 18 =

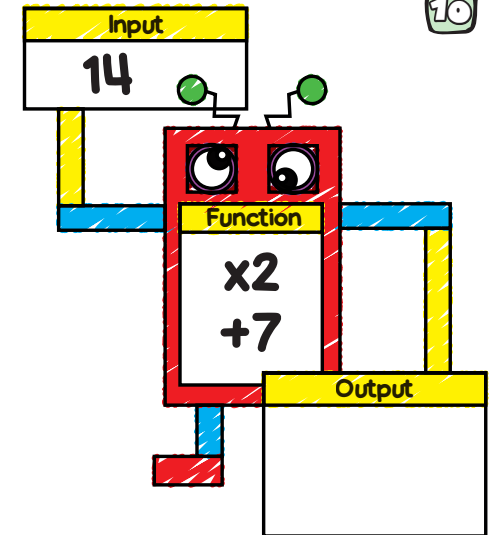
8

$\frac{2}{3}$ of 21 =

9

$\frac{1}{7} + 2 + \frac{4}{7} =$

10



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DATE:

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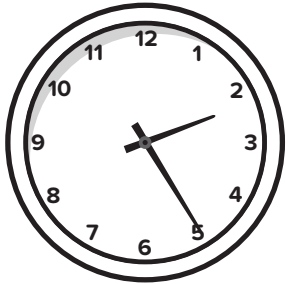
WK: 3

/10

1

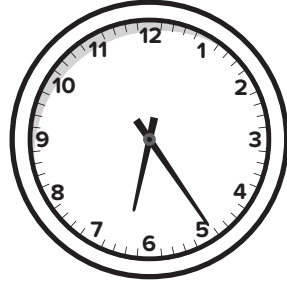
How many days are in a year? _____ days

2



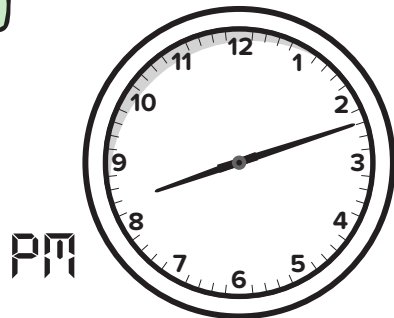
- 25 past 2
- 20 past 3
- 10 to 9

3



Write this time on the digital clock

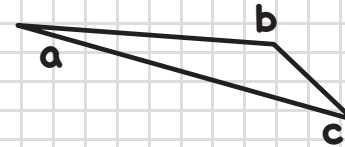
4



PM

Write this time on the digital clock using 24 hour notation

5



Which angle is obtuse?

6

Which fraction is equal to 1?

- $\frac{8}{8}$ $\frac{10}{12}$ $\frac{4}{11}$

7

$\frac{1}{4}$ of 36 =

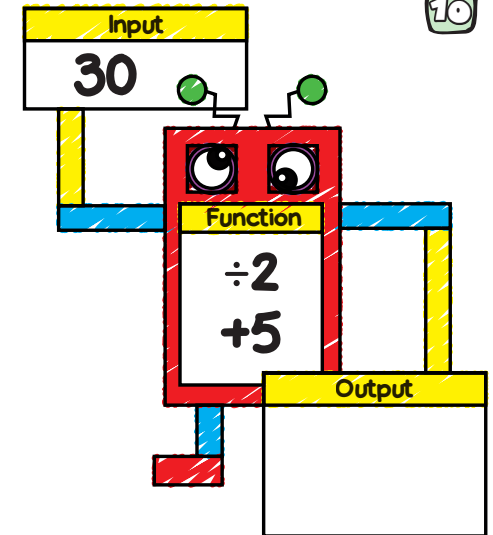
8

$\frac{3}{4}$ of 32 =

9

$\frac{1}{9} + \frac{4}{9} + \frac{2}{9} =$

10



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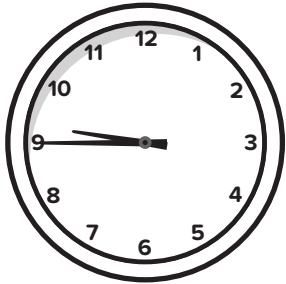
WK:4

/10

1

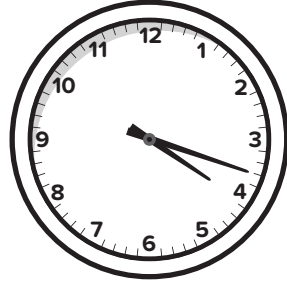
How many days are in September? _____ days

2



- 15 to 6
- 15 past 9
- 15 to 10

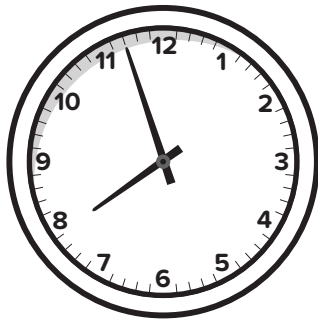
3



Write this time on the digital clock

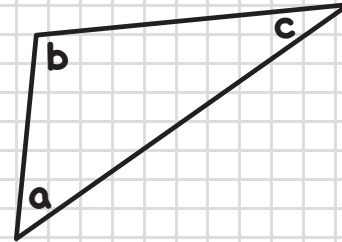
4

AM



Write this time on the digital clock using 24 hour notation

5



Which angle is obtuse?

6

Which fraction is equal to 1?

- $\frac{13}{15}$ $\frac{13}{13}$ $\frac{3}{9}$

7

$\frac{1}{3}$ of 12 =

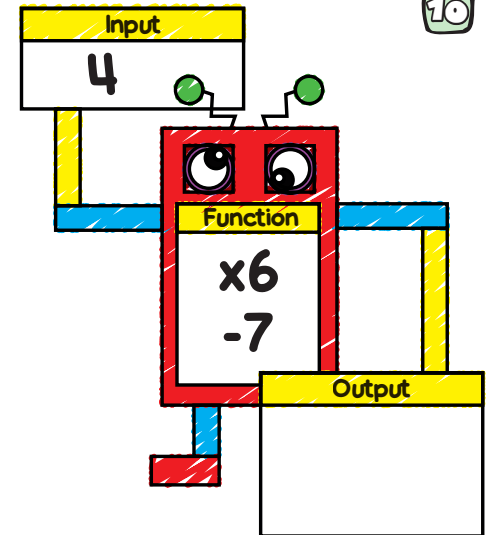
8

$\frac{2}{3}$ of 27 =

9

$\frac{2}{9} + \frac{2}{9} + \frac{4}{9} =$

10



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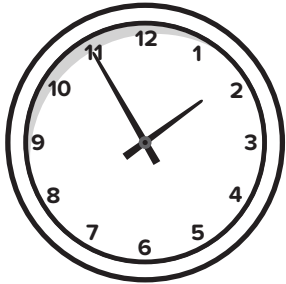
WK: 5

/10

1

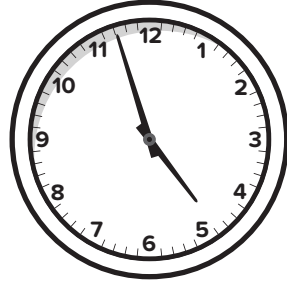
How many days are in May? _____ days

2



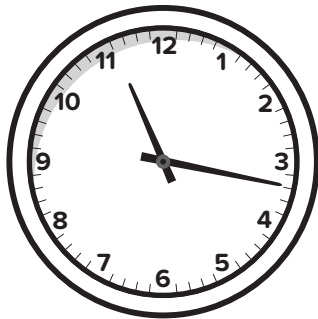
- 20 to 7
- 10 past 3
- 5 to 2

3



Write this time on the digital clock

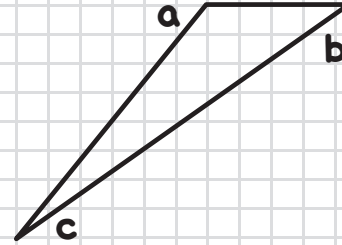
4



AM

Write this time on the digital clock using 24 hour notation

5



Which angle is obtuse?

6

Which fraction is equal to 1?

- $\frac{11}{17}$ $\frac{2}{6}$ $\frac{7}{7}$

7

$\frac{1}{4}$ of 16 =

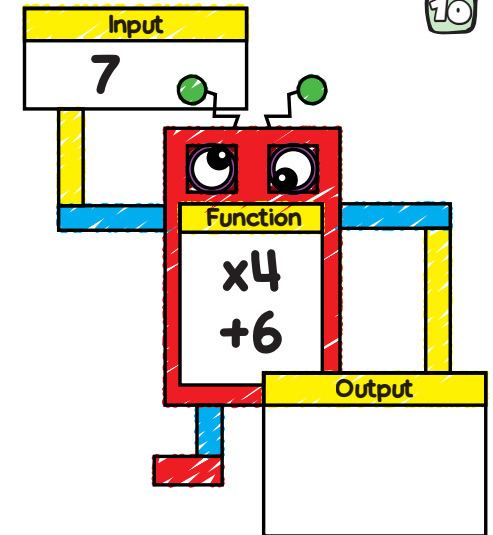
8

$\frac{2}{4}$ of 12 =

9

$\frac{1}{5} + 4 + \frac{2}{5} =$

10



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DATE:

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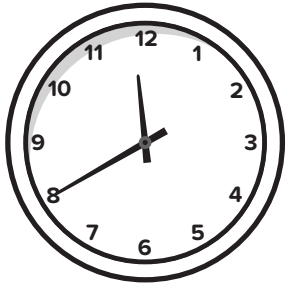
WK: 6

/10

1

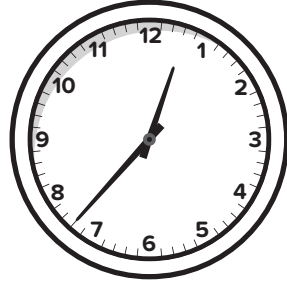
How many days are in June? _____ days

2



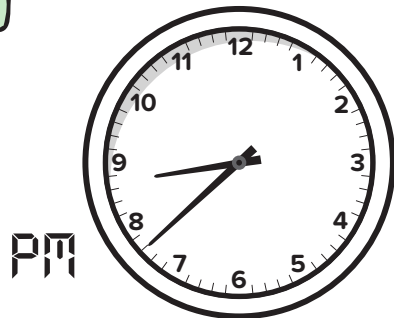
- 20 to 7
- 20 past 3
- 20 to 12

3



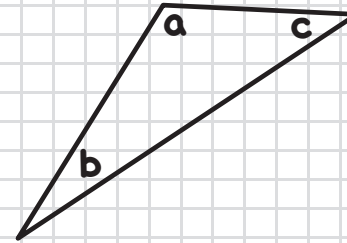
Write this time on the digital clock

4



Write this time on the digital clock using 24 hour notation

5



Which angle is obtuse?

6

Which fraction is equal to 1?

- $\frac{16}{16}$ $\frac{4}{5}$ $\frac{6}{8}$

7

$\frac{1}{3}$ of 9 =

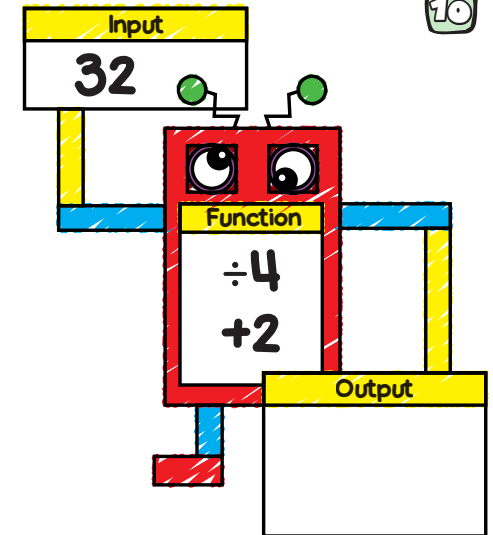
8

$\frac{2}{3}$ of 15 =

9

$\frac{6}{7} - \frac{4}{7} - \frac{1}{7} =$

10



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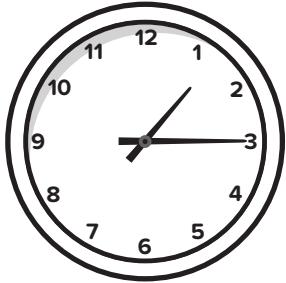
WK: 7

/10

1

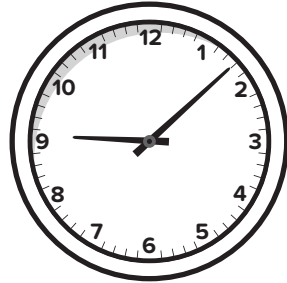
How many days are in a leap year? _____ days

2



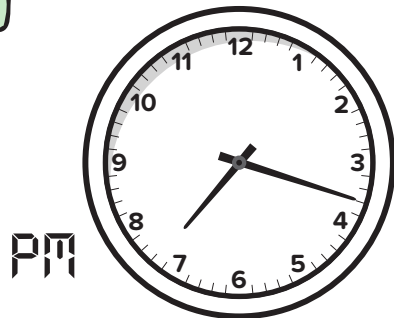
- 15 to 7
- 15 past 1
- 20 to 9

3



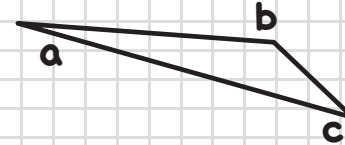
Write this time on the digital clock

4



Write this time on the digital clock using 24 hour notation

5



Which angle is obtuse?

6

Which fraction is equal to 1?

- $\frac{4}{9}$
- $\frac{6}{6}$
- $\frac{2}{12}$

7

$\frac{1}{4}$ of 20 =

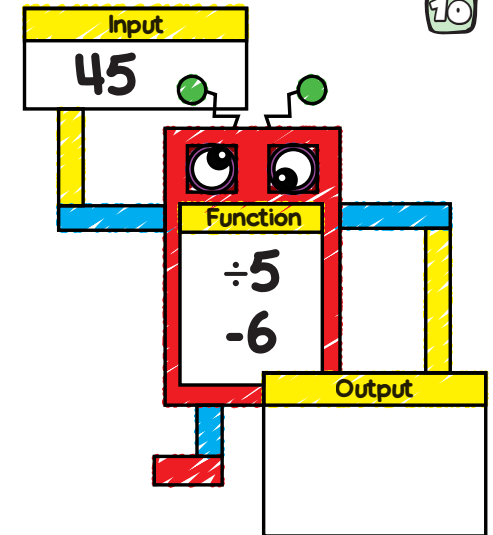
8

$\frac{3}{4}$ of 36 =

9

$\frac{2}{8} + \frac{2}{8} + \frac{1}{8} =$

10



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DATE:

SAFE 12

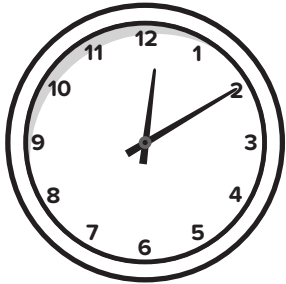
WK: 8

/10

1

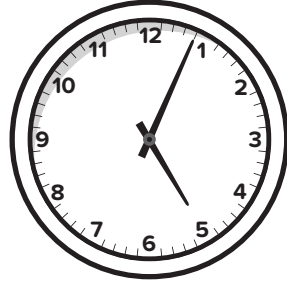
How many days are in October? _____ days

2



- 20 to 11
- 10 past 12
- 5 to 6

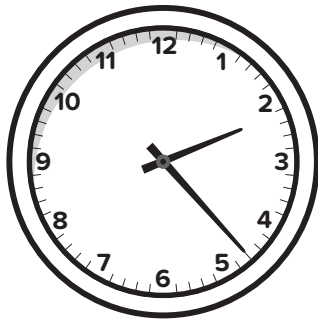
3



Write this time on the digital clock

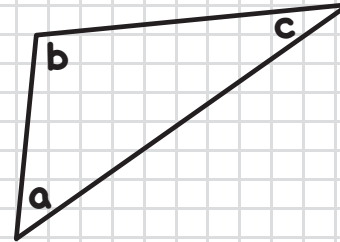
4

AM



Write this time on the digital clock using 24 hour notation

5



Which angle is obtuse?

6

Which fraction is equal to 1?

- $\frac{3}{4}$ $\frac{3}{7}$ $\frac{8}{8}$

7

$\frac{1}{4}$ of 8 =

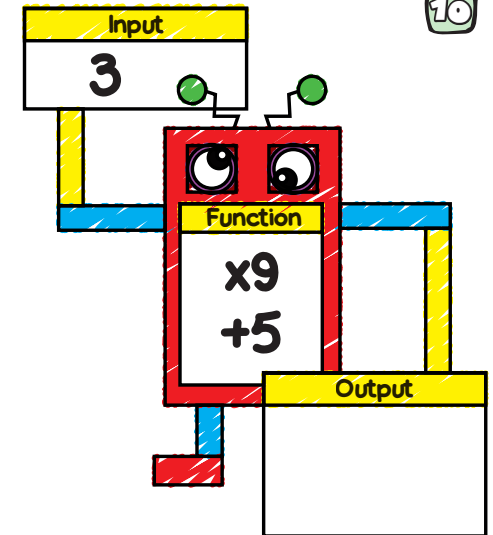
8

$\frac{2}{3}$ of 18 =

9

$8 + \frac{4}{9} + \frac{2}{9} =$

10



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DATE:

SAFE 12

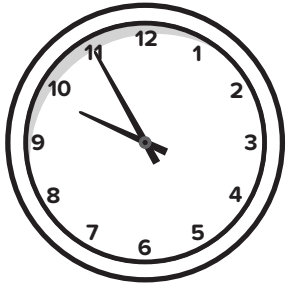
WK: 9

/10

1

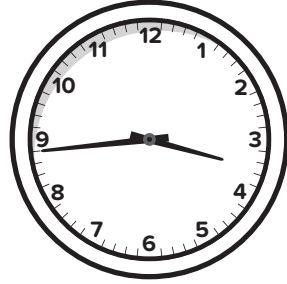
How many days are in April? _____ days

2



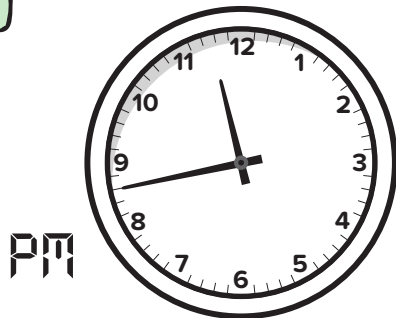
- 10 to 6
- 10 past 5
- 5 to 10

3



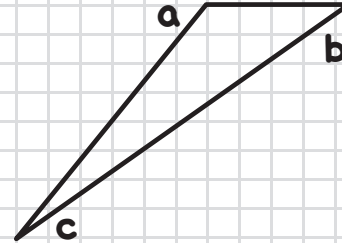
Write this time on the digital clock

4



Write this time on the digital clock using 24 hour notation

5



Which angle is obtuse?

6

Which fraction is equal to 1?

- $\frac{12}{12}$ $\frac{2}{9}$ $\frac{1}{5}$

7

$\frac{1}{3}$ of 6 =

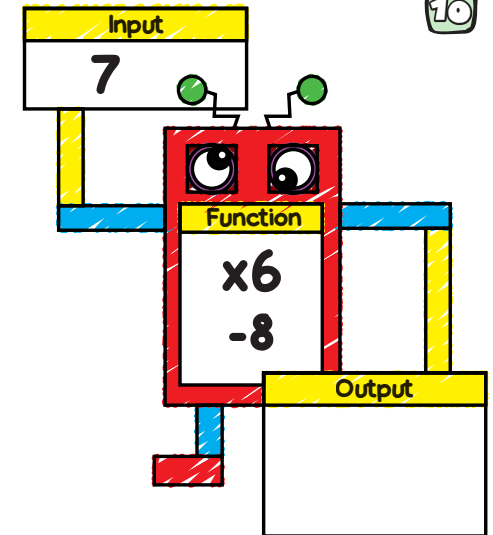
8

$\frac{3}{4}$ of 32 =

9

$\frac{2}{6} + \frac{1}{6} + \frac{2}{6} =$

10



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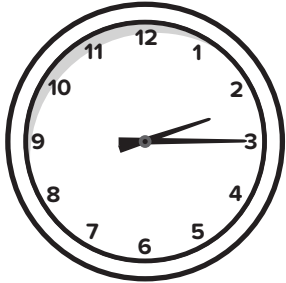
WK: 10

/10

1

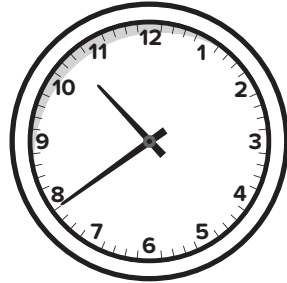
How many days are in February? _____ days

2



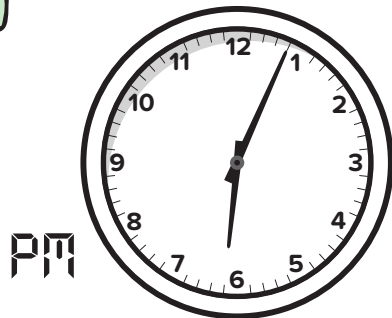
- 15 past 2
- 10 past 9
- 20 to 3

3



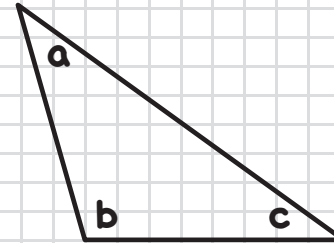
Write this time on the digital clock

4



Write this time on the digital clock using 24 hour notation

5



Which angle is obtuse?

6

Which fraction is equal to 1?

- $\frac{4}{6}$ $\frac{15}{15}$ $\frac{3}{11}$

7

$\frac{1}{4}$ of 12 =

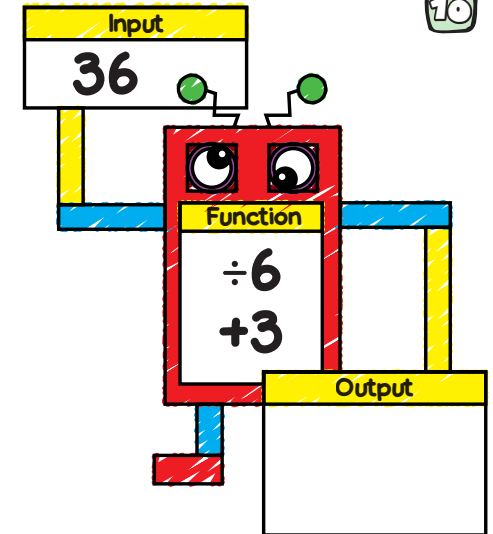
8

$\frac{2}{3}$ of 21 =

9

$2 + \frac{4}{8} + \frac{2}{8} =$

10



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ANSWERS

SAFE 12

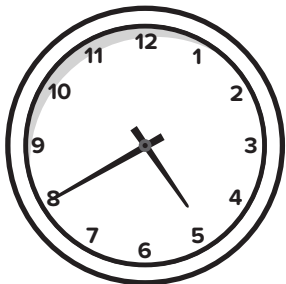
WK: 1

/10

1

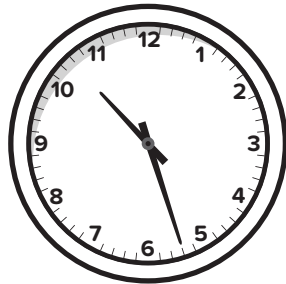
How many days are in January? 31 days

2



- 5 to 5
- 20 past 8
- 20 to 5

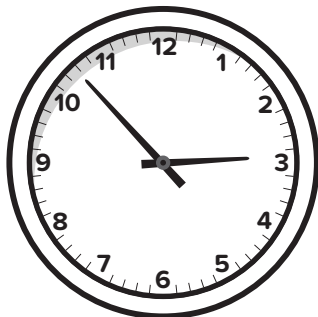
3



Write this time on the digital clock

10:27

4

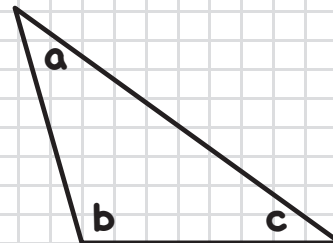


PM

Write this time on the digital clock using 24 hour notation

14:53

5



Which angle is obtuse?

b

6

Which fraction is equal to 1?

$\frac{4}{5}$ $\frac{11}{11}$ $\frac{11}{10}$

7

$\frac{1}{4}$ of 24 =

6

8

$\frac{3}{4}$ of 24 =

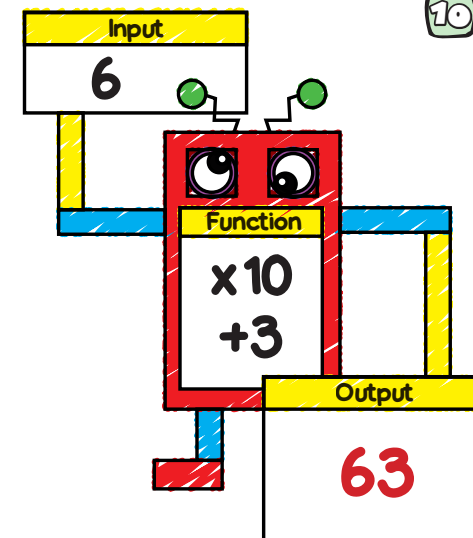
18

9

$\frac{3}{8} + 4 + \frac{2}{8} =$

4 $\frac{5}{8}$

10



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ANSWERS

SAFE 12

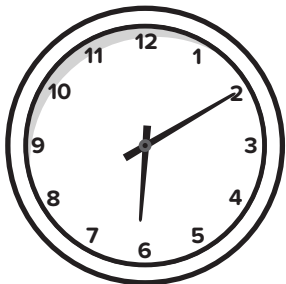
WK: 2

/10

1

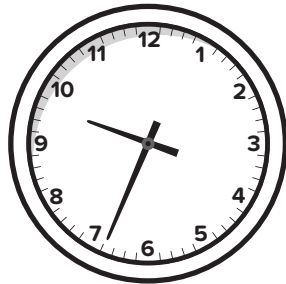
How many days are in March? 31 days

2



- 10 to 2
- 10 past 6
- 15 to 4

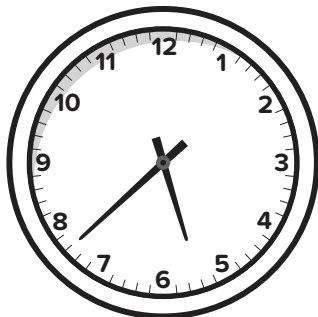
3



Write this time on the digital clock

09:34

4

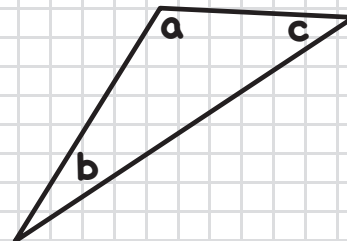


AM

Write this time on the digital clock using 24 hour notation

05:38

5



Which angle is obtuse?

a

6

Which fraction is equal to 1?

$$\frac{6}{7}$$

$$\frac{5}{8}$$

$$\frac{9}{9}$$

7

$$\frac{1}{3} \text{ of } 18 =$$

6

8

$$\frac{2}{3} \text{ of } 21 =$$

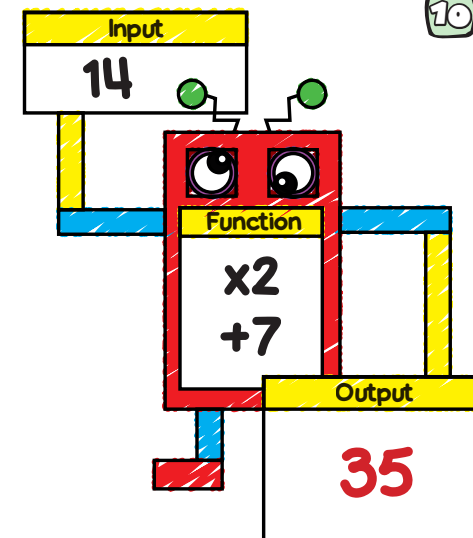
14

9

$$\frac{1}{7} + 2 + \frac{4}{7} =$$

2 $\frac{5}{7}$

10



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ANSWERS

SAFE 12

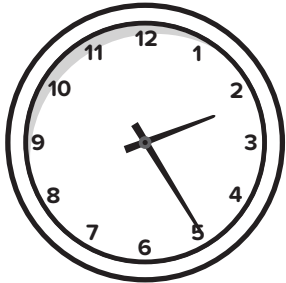
WK: 3

/10

1

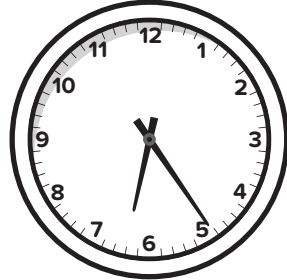
How many days are in a year? 365 days

2



- 25 past 2
- 20 past 3
- 10 to 9

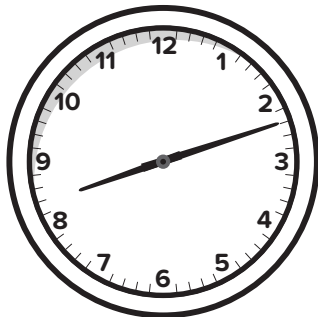
3



Write this time on the digital clock

06:24

4

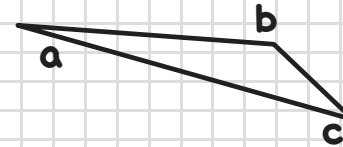


PM

Write this time on the digital clock using 24 hour notation

20:12

5



Which angle is obtuse?

b

6

Which fraction is equal to 1?

$\frac{8}{8}$

$\frac{10}{12}$

$\frac{4}{11}$

7

$\frac{1}{4}$ of 36 =

9

8

$\frac{3}{4}$ of 32 =

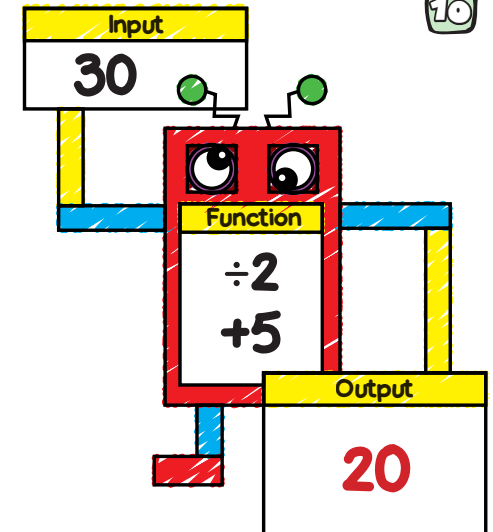
24

9

$\frac{1}{9} + \frac{4}{9} + \frac{2}{9} =$

$\frac{7}{9}$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!



ANSWERS

SAFE 12

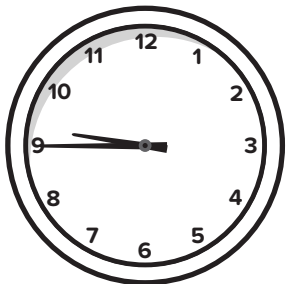
WK:4

/10

1

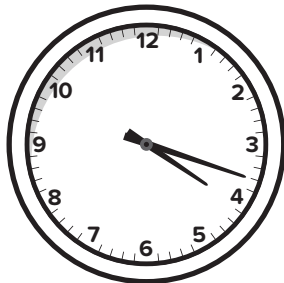
How many days are in September? 30 days

2



- 15 to 6
- 15 past 9
- 15 to 10

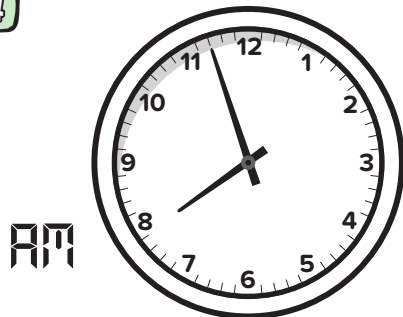
3



Write this time on the digital clock

04:18

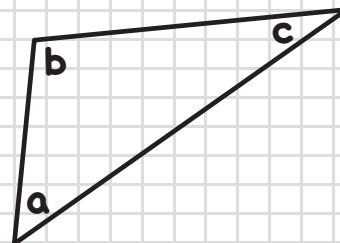
4



Write this time on the digital clock using 24 hour notation

07:52

5



Which angle is obtuse?

b

6

Which fraction is equal to 1?

$\frac{13}{15}$

$\frac{13}{13}$

$\frac{3}{9}$

7

$\frac{1}{3}$ of 12 =

4

8

$\frac{2}{3}$ of 27 =

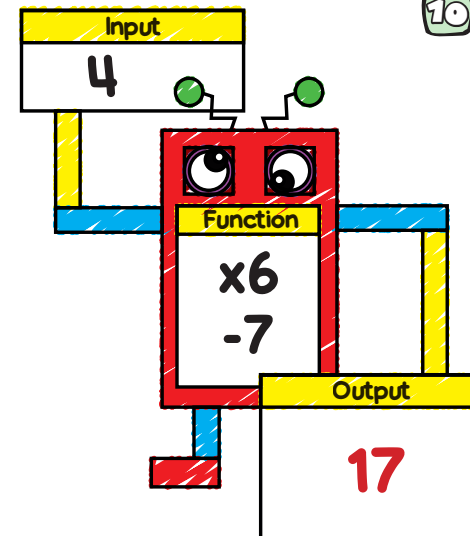
18

9

$\frac{2}{9} + \frac{2}{9} + \frac{4}{9} =$

$\frac{8}{9}$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!

ANSWERS

SAFE 12

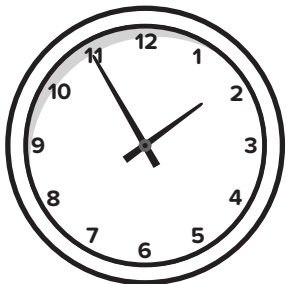
WK: 5

/10

1

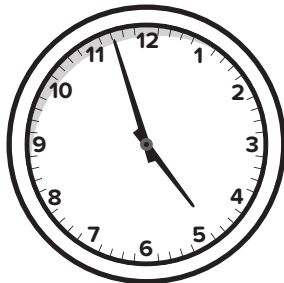
How many days are in May? 31 days

2



- 20 to 7
- 10 past 3
- 5 to 2

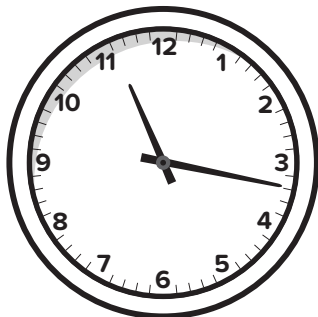
3



Write this time on the digital clock

04:57

4

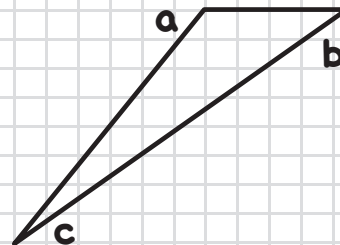


AM

Write this time on the digital clock using 24 hour notation

11:17

5



Which angle is obtuse?

a

6

Which fraction is equal to 1?

$\frac{11}{17}$

$\frac{2}{6}$

$\frac{7}{7}$

7

$\frac{1}{4}$ of 16 =

4

8

$\frac{2}{4}$ of 12 =

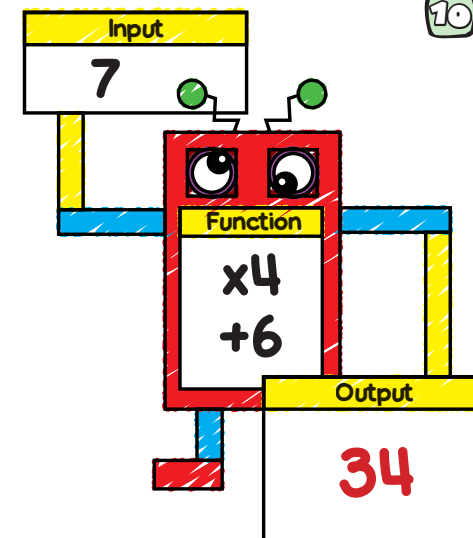
6

9

$\frac{1}{5} + 4 + \frac{2}{5} =$

4 $\frac{3}{5}$

10



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SAFE 12

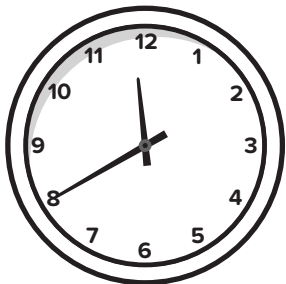
WK: 6

/10

1

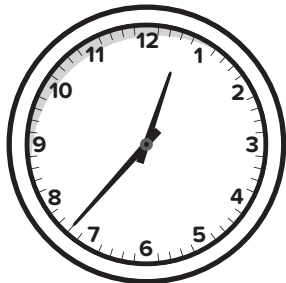
How many days are in June? 30 days

2



- 20 to 7
- 20 past 3
- 20 to 12

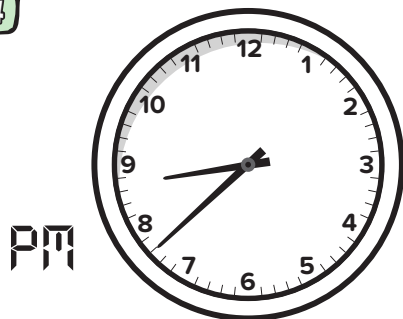
3



Write this time on the digital clock

12:37

4

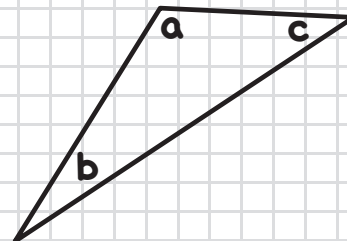


PM

Write this time on the digital clock using 24 hour notation

20:38

5



Which angle is obtuse?

a

6

Which fraction is equal to 1?

$\frac{16}{16}$
 $\frac{4}{5}$
 $\frac{6}{8}$

7

$\frac{1}{3}$ of 9 = 3

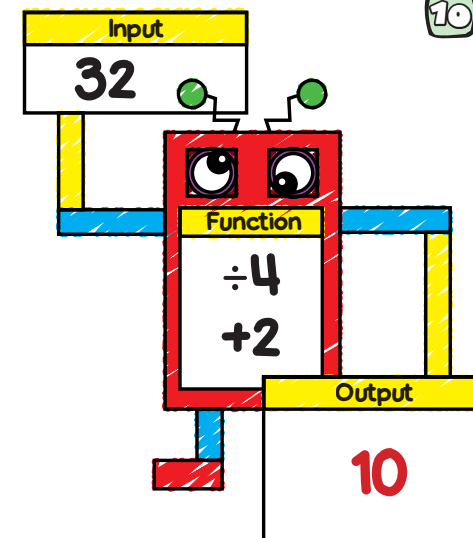
8

$\frac{2}{3}$ of 15 = 10

9

$\frac{6}{7} - \frac{4}{7} - \frac{1}{7} =$
 $\frac{1}{7}$

10



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SAFE 12

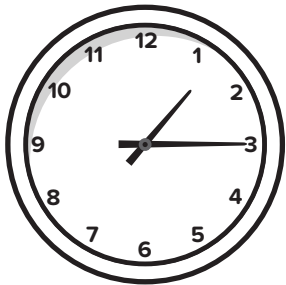
WK: 7

/10

1

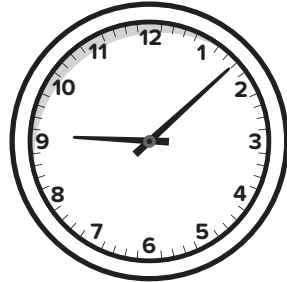
How many days are in a leap year? 366 days

2



- 15 to 7
- 15 past 1
- 20 to 9

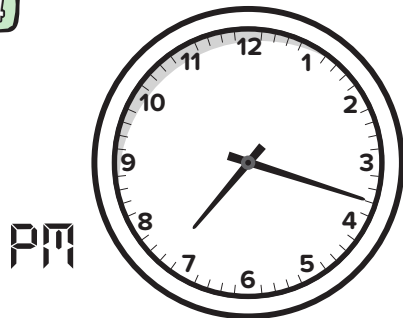
3



Write this time on the digital clock

09:08

4



Write this time on the digital clock using 24 hour notation

19:18

5



Which angle is obtuse?

b

6

Which fraction is equal to 1?

$\frac{4}{9}$ $\frac{6}{6}$ $\frac{2}{12}$

7

$\frac{1}{4}$ of 20 =

5

8

$\frac{3}{4}$ of 36 =

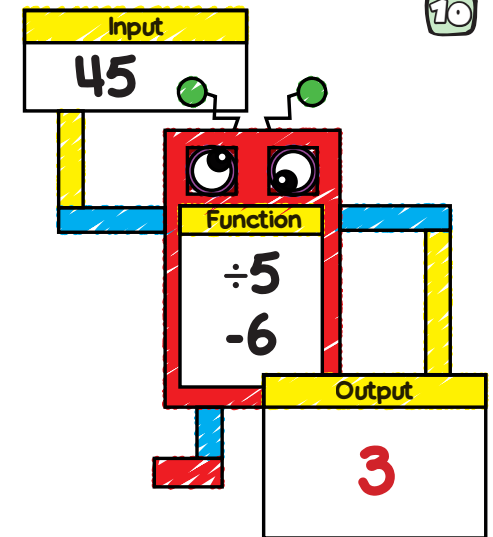
27

9

$\frac{2}{8} + \frac{2}{8} + \frac{1}{8} =$

$\frac{5}{8}$

10



MY LAST SCORE?!

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ANSWERS

SAFE 12

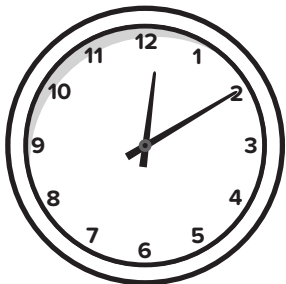
WK: 8

/10

1

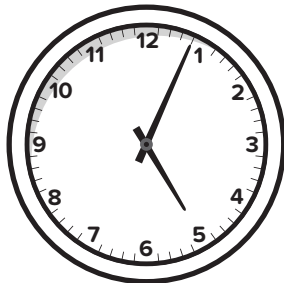
How many days are in October? 31 days

2



- 20 to 11
- 10 past 12
- 5 to 6

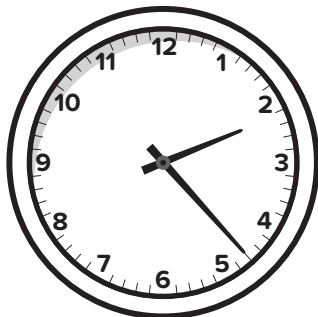
3



Write this time on the digital clock

05:04

4

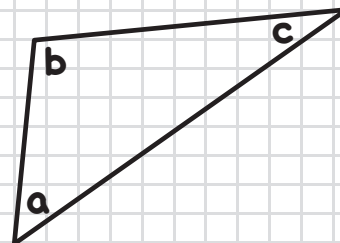


AM

Write this time on the digital clock using 24 hour notation

02:23

5



Which angle is obtuse?

b

6

Which fraction is equal to 1?

$\frac{3}{4}$

$\frac{3}{7}$

$\frac{8}{8}$

7

$\frac{1}{4}$ of 8 =

2

8

$\frac{2}{3}$ of 18 =

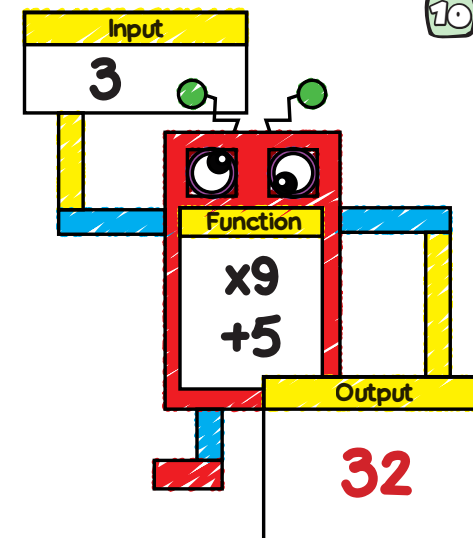
12

9

$8 + \frac{4}{9} + \frac{2}{9} =$

$8 \frac{6}{9}$

10



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ANSWERS

SAFE 12

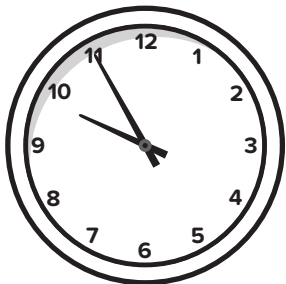
WK: 9

/10

1

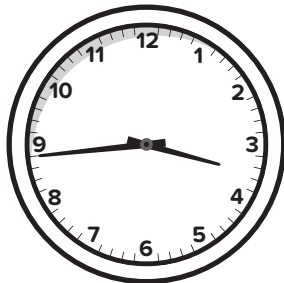
How many days are in April? 30 days

2



- 10 to 6
- 10 past 5
- 5 to 10

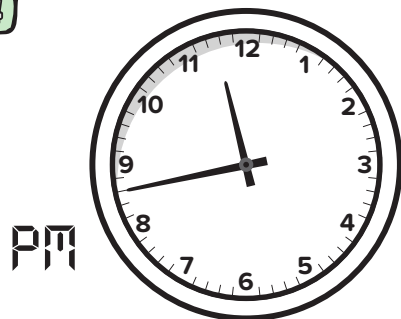
3



Write this time on the digital clock

03:44

4

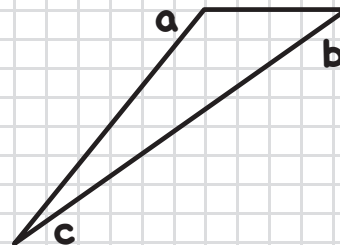


PM

Write this time on the digital clock using 24 hour notation

23:43

5



Which angle is obtuse?

a

6

Which fraction is equal to 1?

$\frac{12}{12}$

$\frac{2}{9}$

$\frac{1}{5}$

7

$\frac{1}{3}$ of 6 =

2

8

$\frac{3}{4}$ of 32 =

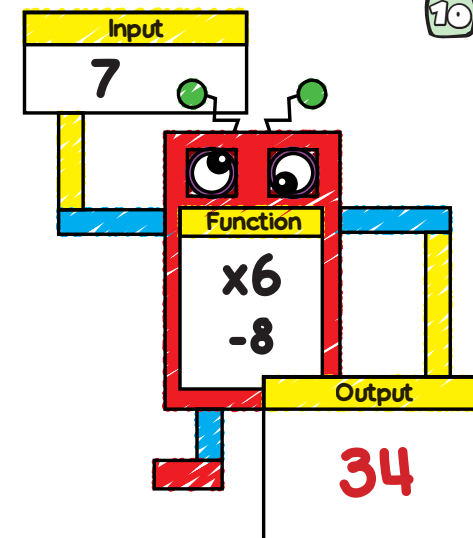
24

9

$\frac{2}{6} + \frac{1}{6} + \frac{2}{6} =$

$\frac{5}{6}$

10



MY LAST SCORE?!

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ANSWERS

SAFE 12

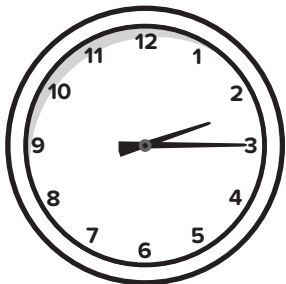
WK: 10

/10

1

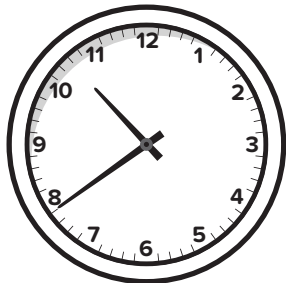
How many days are in February? 28 days

2



- 15 past 2
- 10 past 9
- 20 to 3

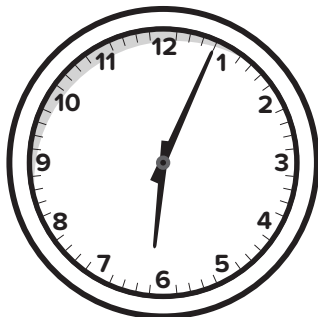
3



Write this time on the digital clock

10:39

4

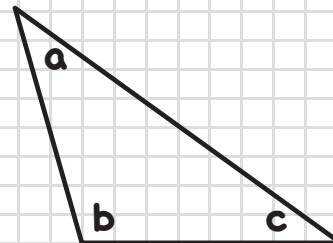


PM

Write this time on the digital clock using 24 hour notation

18:04

5



Which angle is obtuse?

b

6

Which fraction is equal to 1?

$\frac{4}{6}$ $\frac{15}{15}$ $\frac{3}{11}$

7

$\frac{1}{4}$ of 12 =

3

8

$\frac{2}{3}$ of 21 =

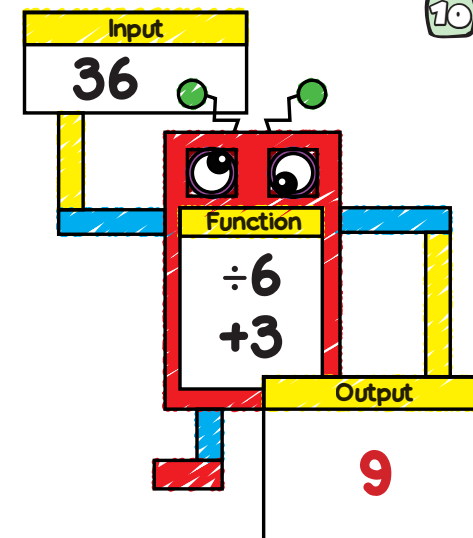
14

9

$2 + \frac{4}{8} + \frac{2}{8} =$

$2 \frac{6}{8}$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!

