

Extending Patterns

To extend a pattern, find the difference between each set of terms.
Then write the rule.

1, 4, 6, 9, 11, ... Rule: Start at 1. Add 3, then add 2.

Use the rule to extend the pattern: 1, 4, 6, 9, 11, 14, 16, 19, ...

1. Find the difference between each set of terms.

Write the rule. Then extend the pattern.

a) 32, $\overset{+3}{\rule{0.5cm}{0.4pt}}$ 35, $\rule{0.5cm}{0.4pt}$ 39, $\rule{0.5cm}{0.4pt}$ 42, $\rule{0.5cm}{0.4pt}$ 46, _____, _____, _____, ...

Rule: _____

b) 74, $\rule{0.5cm}{0.4pt}$ 79, $\rule{0.5cm}{0.4pt}$ 81, $\rule{0.5cm}{0.4pt}$ 86, $\rule{0.5cm}{0.4pt}$ 88, _____, _____, _____, ...

Rule: _____

c) 40, $\rule{0.5cm}{0.4pt}$ 38, $\rule{0.5cm}{0.4pt}$ 35, $\rule{0.5cm}{0.4pt}$ 33, $\rule{0.5cm}{0.4pt}$ 30, _____, _____, _____, ...

Rule: _____

d) 65, $\rule{0.5cm}{0.4pt}$ 55, $\rule{0.5cm}{0.4pt}$ 50, $\rule{0.5cm}{0.4pt}$ 40, $\rule{0.5cm}{0.4pt}$ 35, _____, _____, _____, ...

Rule: _____

Four-Digit Subtraction with Regrouping

Line up the ones, tens, hundreds, and thousands.

Subtract the ones. Subtract the tens.

Trade 1 thousand from the thousands for 10 hundreds in the hundreds column.

Subtract the hundreds, then the thousands.

thousands	hundreds	tens	ones
4	16		
5	6	9	6
- 2	8	8	3
2	8	1	3

You cannot take 8 from 6. So, trade 1 thousand from the thousands for 10 hundreds. Now there are 16 hundreds.

1. Subtract by regrouping where needed. Use a place value chart to help you. Shade the ones column yellow, the tens column orange, the hundreds column green, and the thousands column blue.

$$\begin{array}{|c|c|c|c|} \hline \square & \square & \square & \square \\ \hline 4 & 1 & 8 & 6 \\ - 2 & 2 & 7 & 5 \\ \hline & & & \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|c|} \hline \square & \square & \square & \square \\ \hline 6 & 3 & 1 & 7 \\ - 3 & 1 & 3 & 6 \\ \hline & & & \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|c|} \hline \square & \square & \square & \square \\ \hline 4 & 6 & 3 & 5 \\ - 3 & 2 & 6 & 4 \\ \hline & & & \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|c|} \hline \square & \square & \square & \square \\ \hline 5 & 5 & 5 & 6 \\ - 4 & 2 & 9 & 3 \\ \hline & & & \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|c|} \hline \square & \square & \square & \square \\ \hline 5 & 2 & 4 & 9 \\ - 3 & 8 & 3 & 7 \\ \hline & & & \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|c|} \hline \square & \square & \square & \square \\ \hline 3 & 2 & 3 & 8 \\ - 1 & 1 & 5 & 8 \\ \hline & & & \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|c|} \hline \square & \square & \square & \square \\ \hline 6 & 5 & 9 & 0 \\ - 4 & 3 & 8 & 5 \\ \hline & & & \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|c|} \hline \square & \square & \square & \square \\ \hline 3 & 3 & 9 & 4 \\ - 1 & 4 & 9 & 4 \\ \hline & & & \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|c|} \hline \square & \square & \square & \square \\ \hline 4 & 3 & 9 & 8 \\ - 2 & 4 & 8 & 7 \\ \hline & & & \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|c|} \hline \square & \square & \square & \square \\ \hline 7 & 4 & 8 & 1 \\ - 3 & 2 & 4 & 2 \\ \hline & & & \\ \hline \end{array}$$

Hint: Regroup in more than one column.

$$\begin{array}{|c|c|c|c|} \hline \square & \square & \square & \square \\ \hline 8 & 2 & 9 & 3 \\ - 5 & 7 & 7 & 6 \\ \hline & & & \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|c|} \hline \square & \square & \square & \square \\ \hline 4 & 7 & 8 & 9 \\ - 3 & 2 & 9 & 6 \\ \hline & & & \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|c|} \hline \square & \square & \square & \square \\ \hline 9 & 2 & 1 & 5 \\ - 6 & 7 & 5 & 5 \\ \hline & & & \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|c|} \hline \square & \square & \square & \square \\ \hline 3 & 4 & 7 & 4 \\ - 1 & 8 & 8 & 3 \\ \hline & & & \\ \hline \end{array}$$

$$\begin{array}{|c|c|c|c|} \hline \square & \square & \square & \square \\ \hline 5 & 4 & 7 & 1 \\ - 1 & 6 & 5 & 4 \\ \hline & & & \\ \hline \end{array}$$

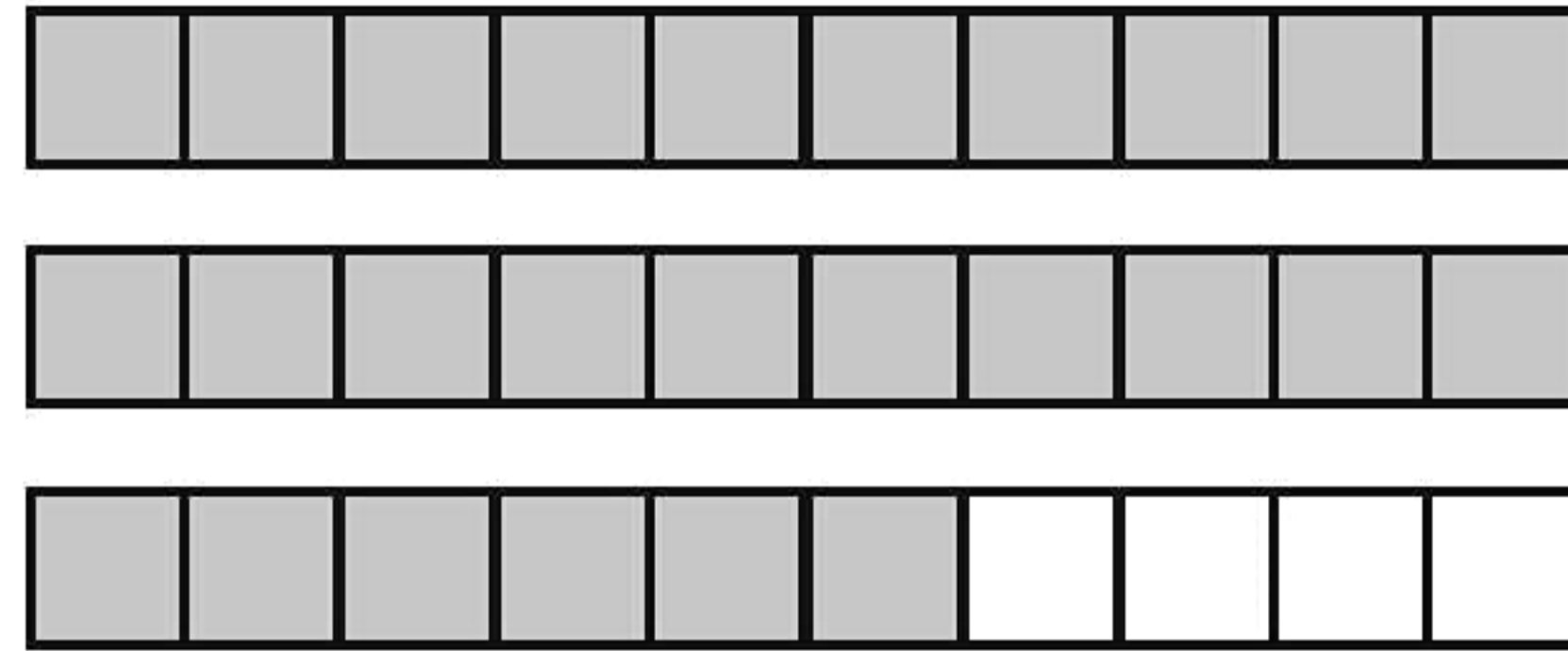
Adding Decimal Numbers

You can use fraction strips to add decimals.
Shade the tenths in each number.

2.5

+

2.6 =



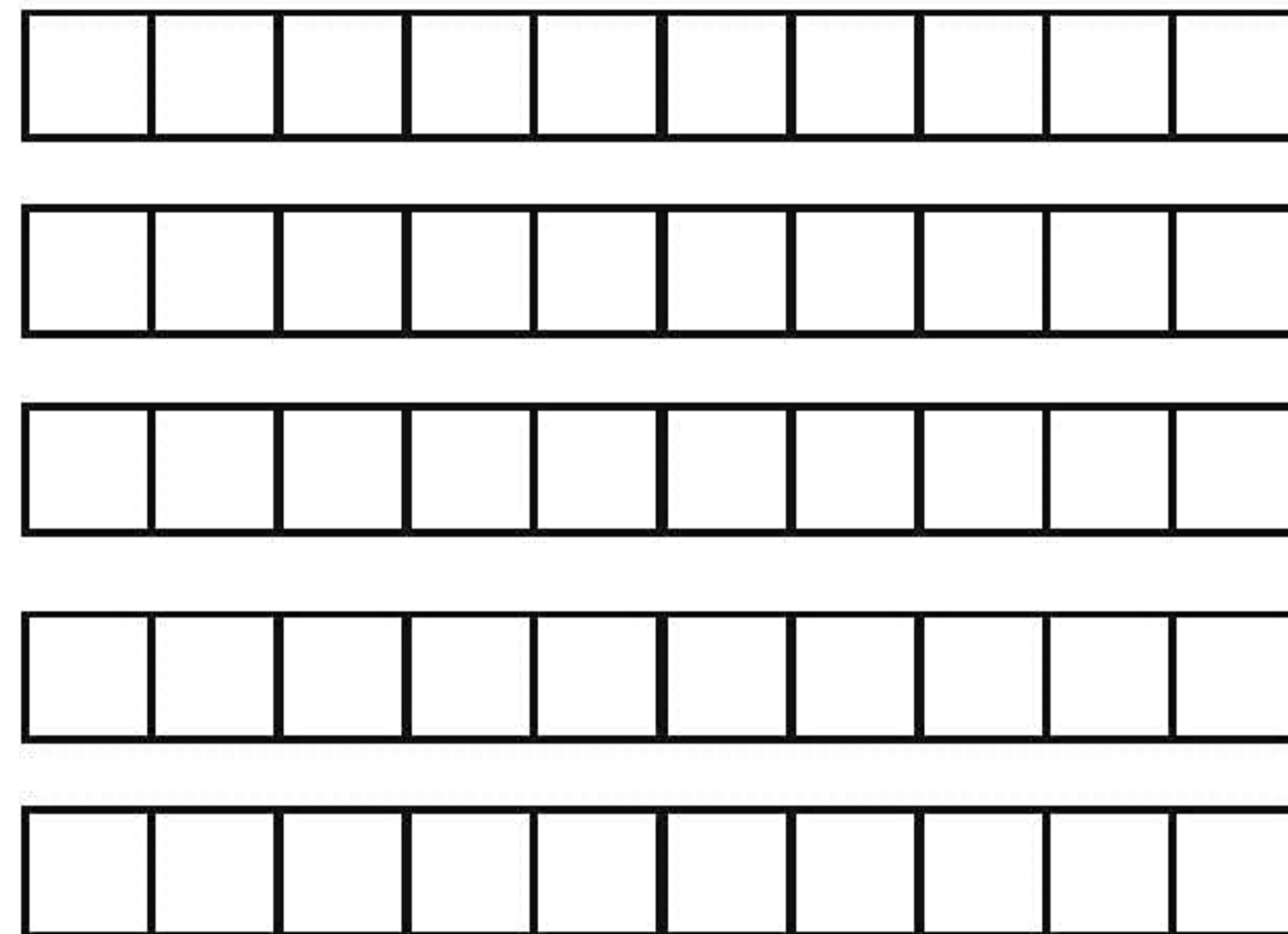
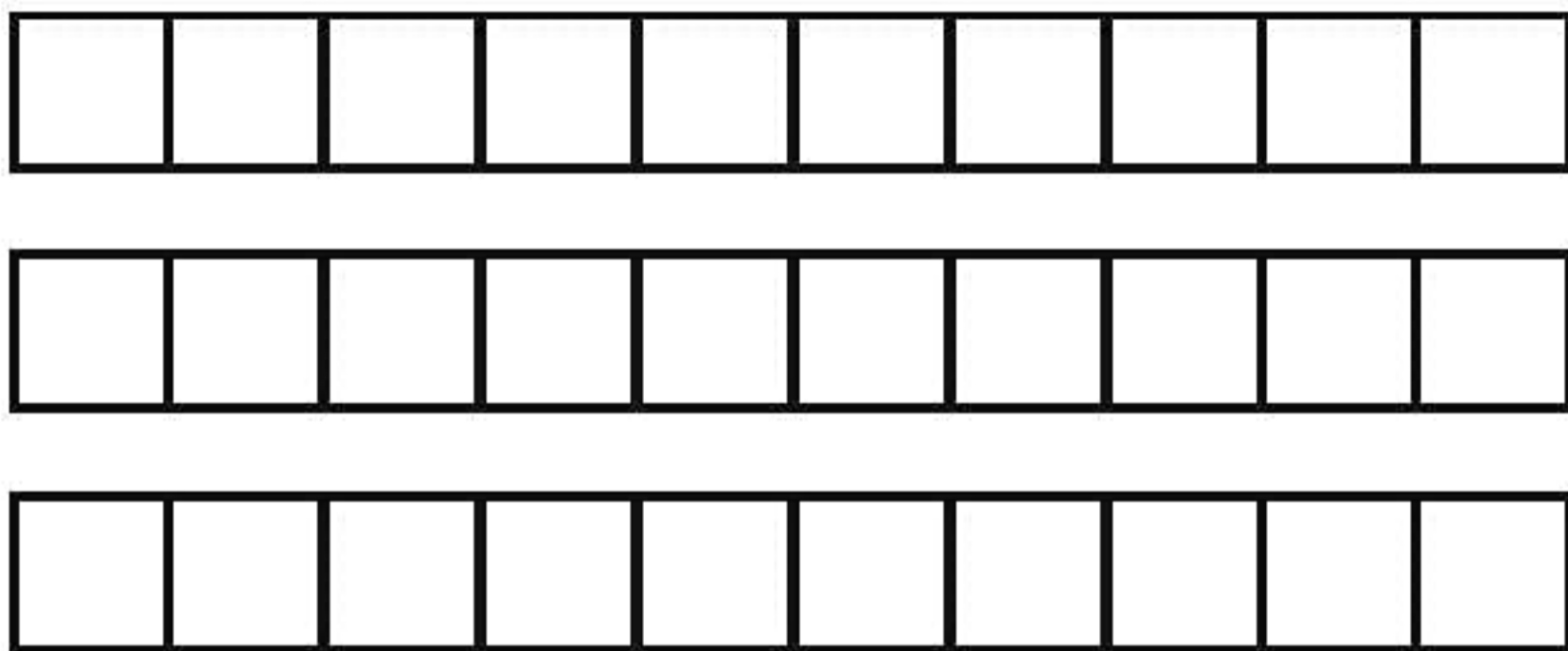
$\frac{5}{10}$ and $\frac{6}{10} = 1$ whole and 1 tenth

Add the wholes and tenths: $2 + 2 + 1.1 = 5.1$

So, $2.5 + 2.6 = \underline{5.1}$

1. Shade fraction strips to show each number. Then add. Show your work.

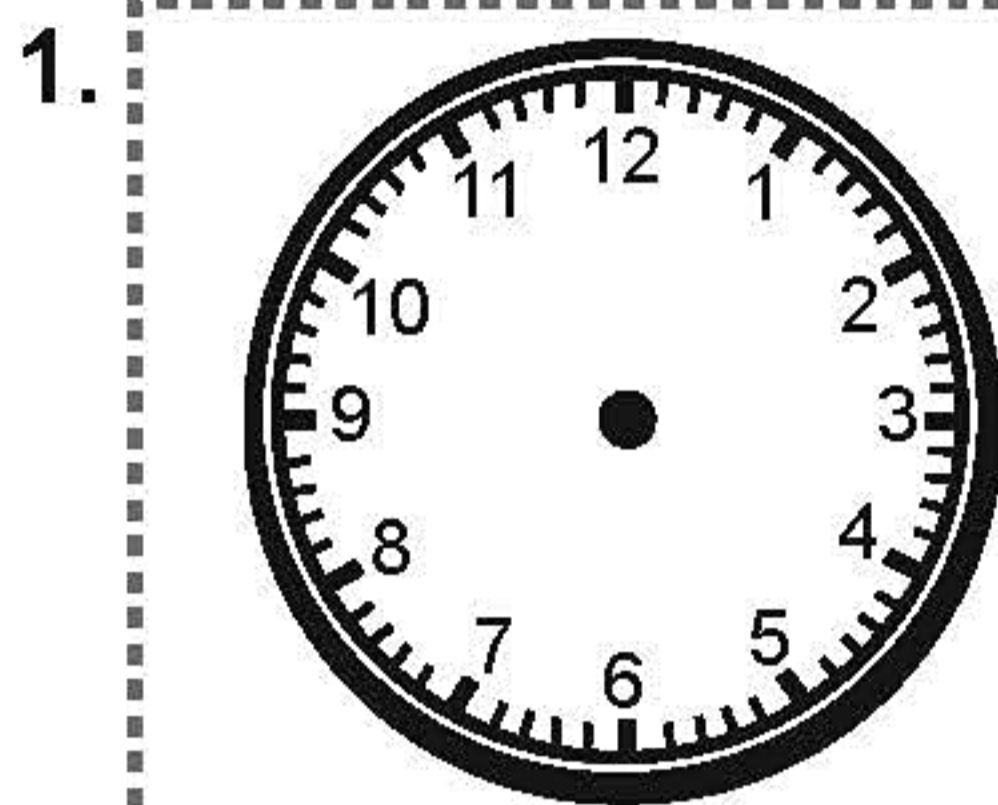
a) $2.9 + 4.5 =$



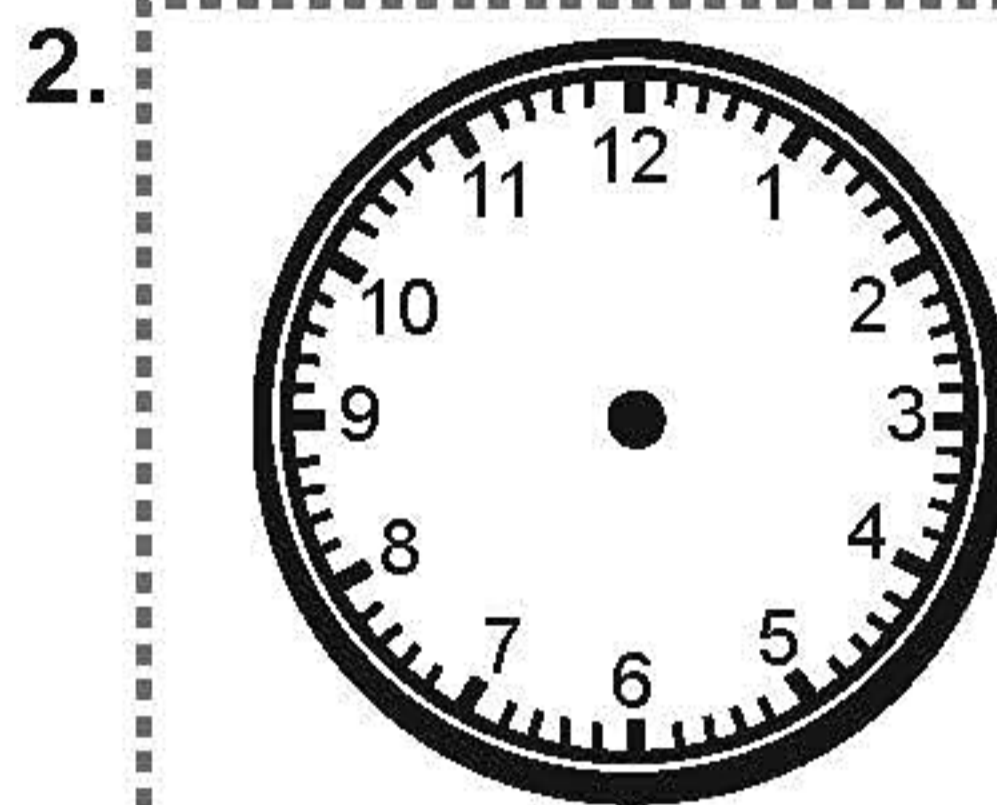
Draw the Hands

Draw the two hands on the clock to show the time.
Highlight the hour hand blue. Highlight the minute hand red.

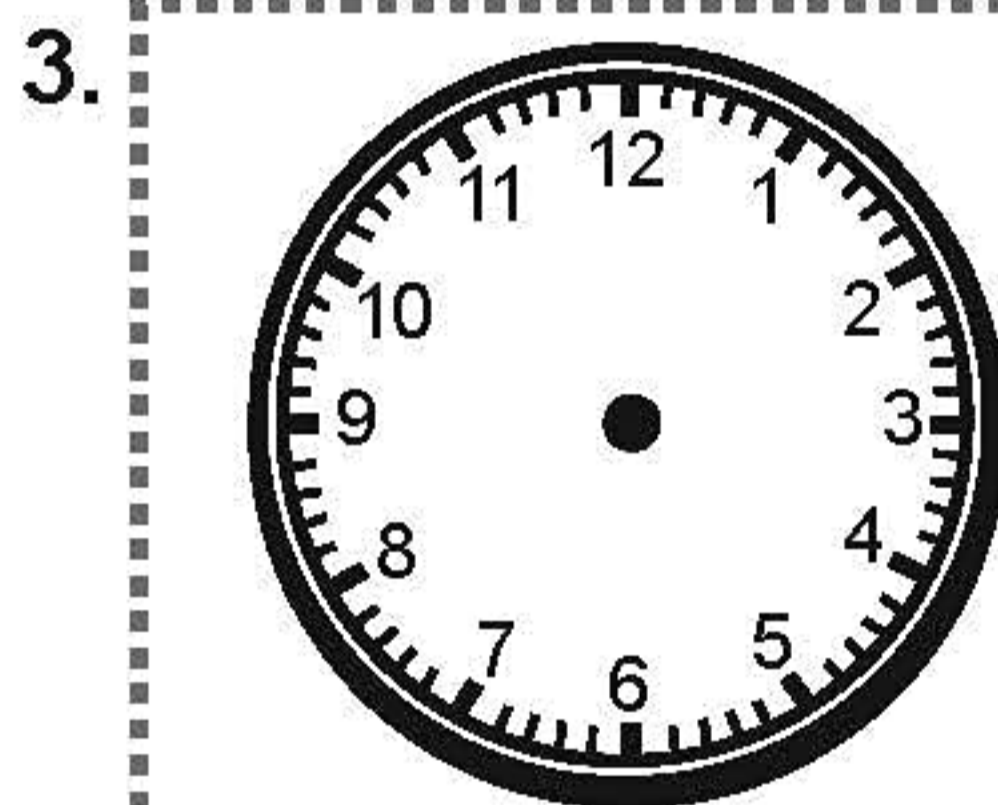
Remember,
the short hand tells
the hour.
The long hand
tells the
minutes.



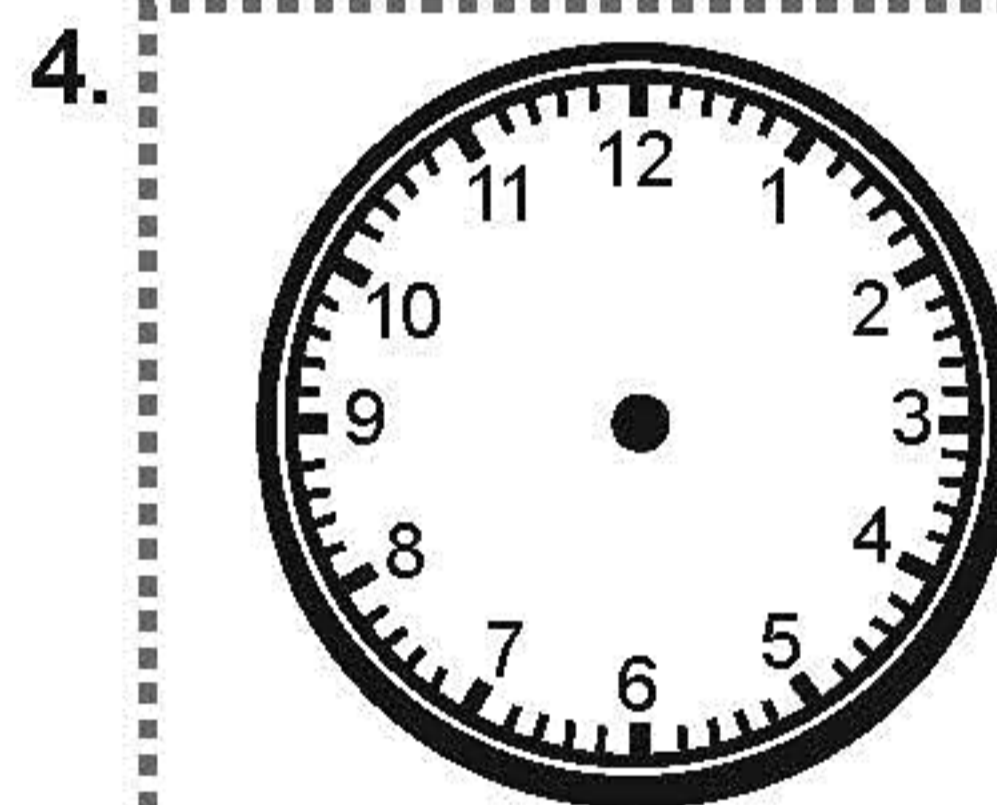
10:36



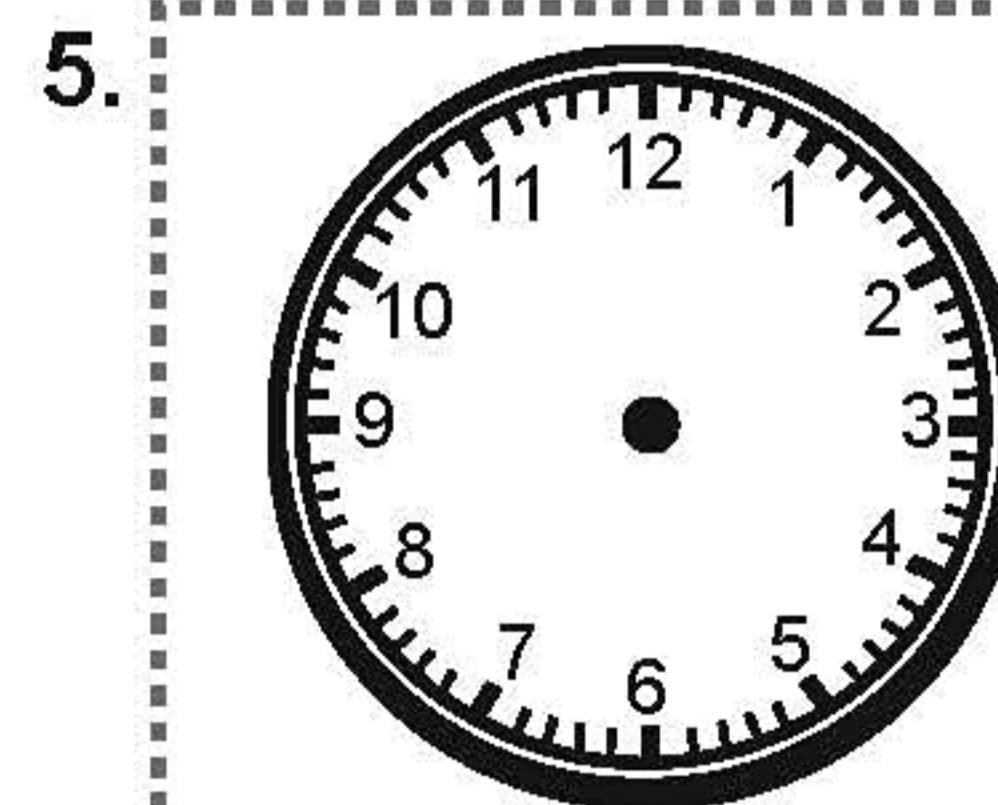
seven minutes
after five



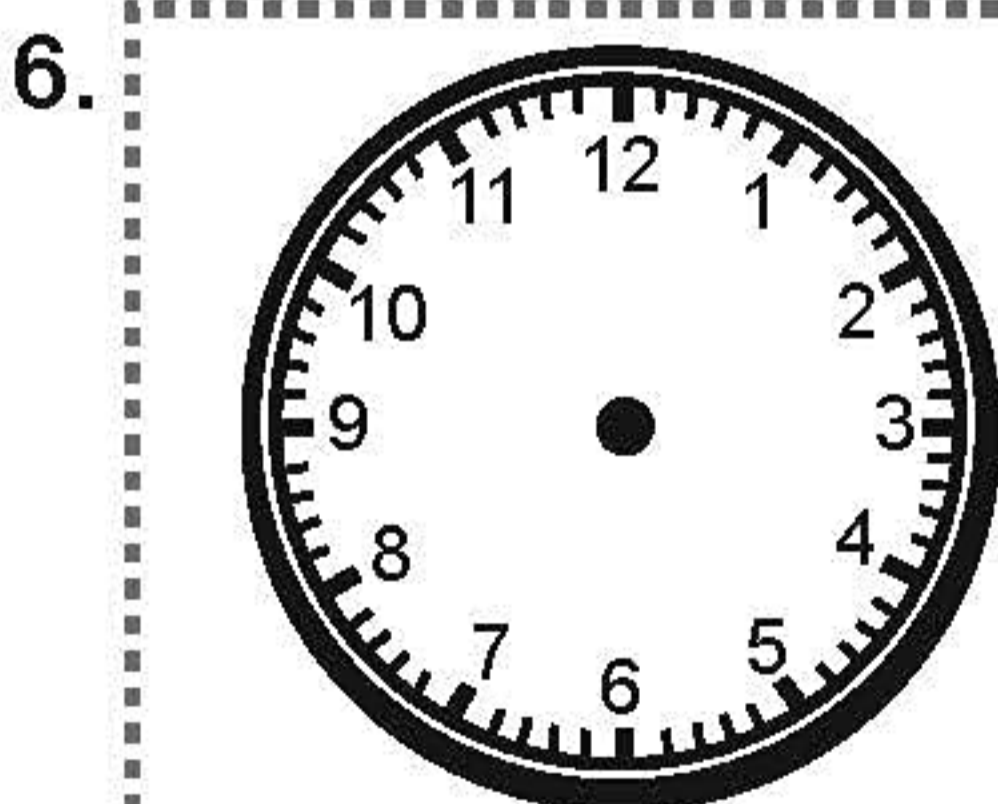
eighteen minutes
to six



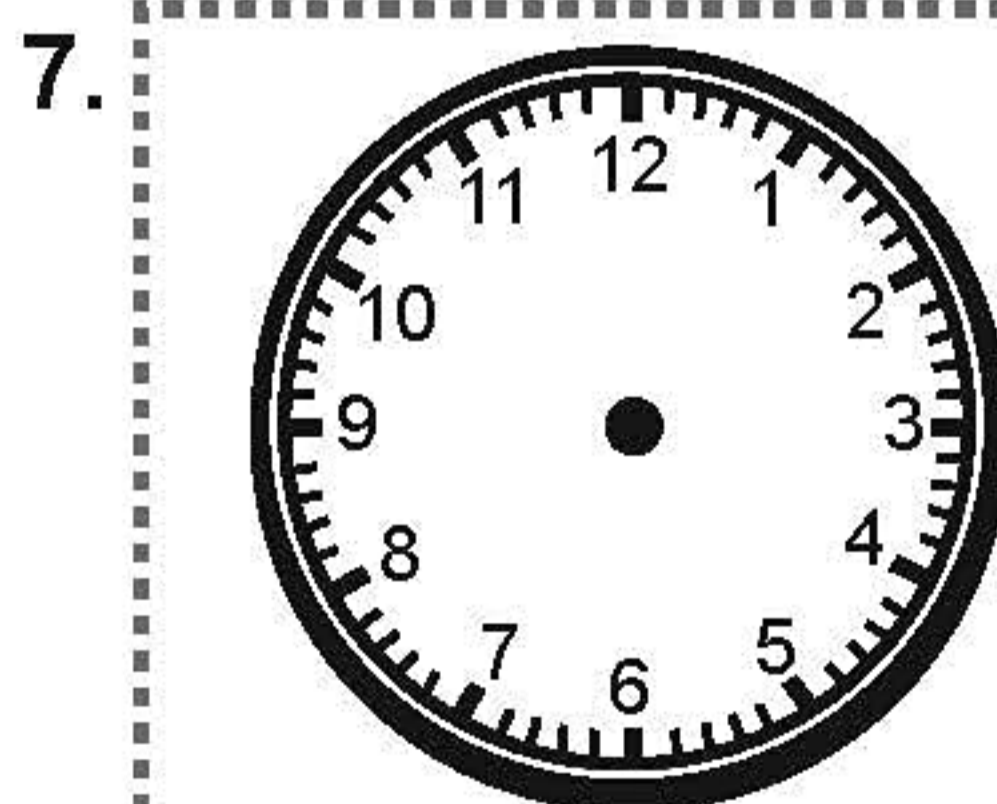
twenty-one minutes
past three



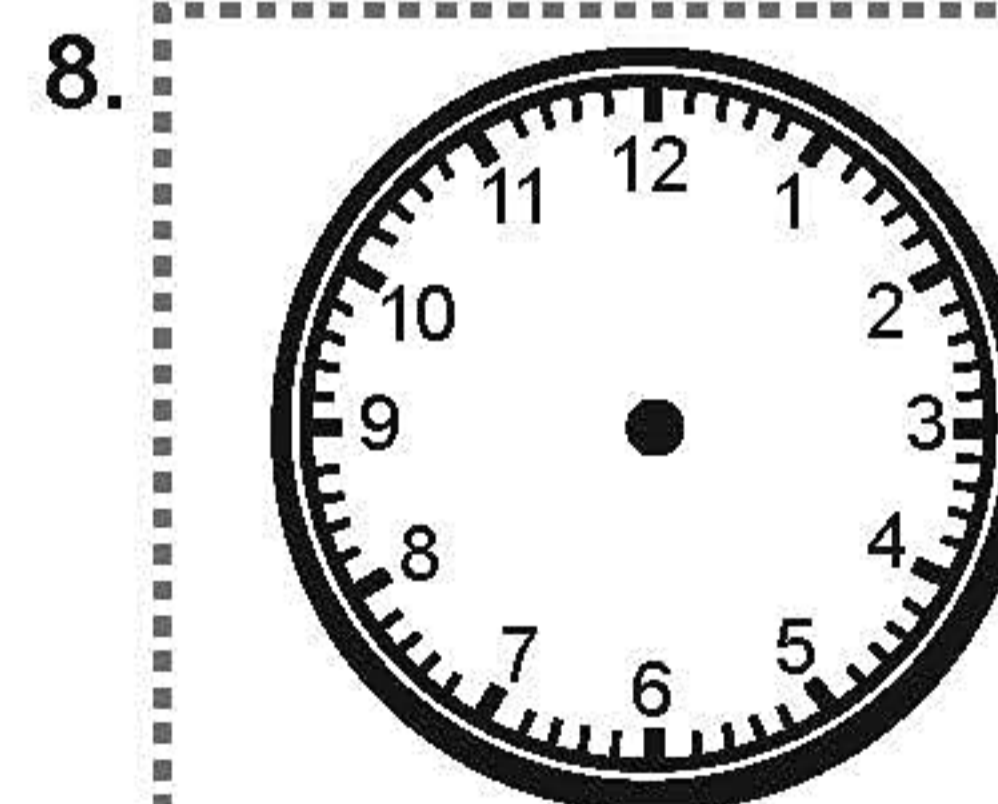
sixteen minutes
after one



6:28



three minutes
after two



3:51