

7 Subtract.

$$2\frac{3}{8} - 1\frac{1}{4} = \frac{9}{8} = 1\frac{1}{8}$$

8 Solve.

(a)  $\frac{3}{7} \times 12 = \frac{36}{7} = 5\frac{1}{7}$

(b)  $2\frac{2}{5} \times 5 = 12$

- 9 Lulu has 3 packets of biscuits. Each packet weighs  $1\frac{2}{5}$  kg. What is the total mass of the 3 packets of biscuits?

Biscuits 

$1\frac{2}{5}$ kg		
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$$3 \times 1\frac{2}{5} \text{ kg} = 4\frac{1}{5} \text{ kg}$$

The total mass of the 3 packets is  $4\frac{1}{5}$  kg

- 10 Hannah used 3 m of cloth to sew a skirt. She needs  $1\frac{2}{9}$  times that amount to sew a dress. How many metres of cloth does she need for the dress?

Skirt 

3 m
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Dress 

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$$3 \times 1\frac{2}{9} = 3\frac{2}{3} \text{ m}$$

Hannah needs  $3\frac{2}{3}$  m of cloth to sew a dress

There are a total of 14 stars in the diagram below. 7 of the stars are shaded.



How many more shaded stars must be added to the diagram so that  $\frac{3}{4}$  of all the stars are shaded?

Dexter and Jack are thinking of a two-digit number between 20 and 30

Dexter finds two thirds of the number.

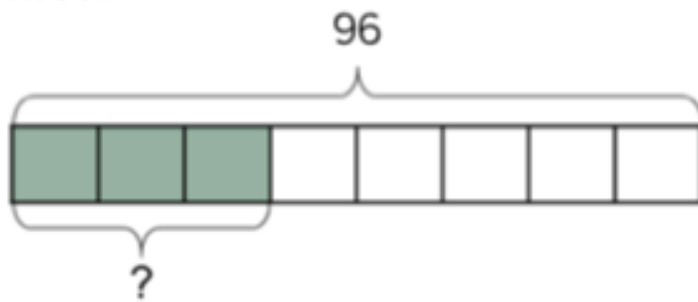
Jack multiplies the number by  $\frac{2}{3}$

Their new two-digit number has a digit total that is one more than that of their original number.

What number did they start with?

Show each step of their calculation.

Write a problem that matches the bar model.



What other questions could you ask from this model?

$\frac{7}{16}$  of a class are boys.

There are 18 girls in the class.

How many children are in the class?

**Answers below:**

## Mind Workout

Date: \_\_\_\_\_

There are a total of 14 stars in the diagram below. 7 of the stars are shaded.



How many more shaded stars must be added to the diagram so that  $\frac{3}{4}$  of all the stars are shaded?

**By adding 14 more shaded stars the total of shaded stars will be 21 and there will be 28 stars in total.**

$$\frac{21}{28} = \frac{3}{4}$$

Dexter and Jack are thinking of a two-digit number between 20 and 30

Dexter finds two thirds of the number.

Jack multiplies the number by  $\frac{2}{3}$

Their new two-digit number has a digit total that is one more than that of their original number.

What number did they start with?

Show each step of their calculation.

They started with 24

Dexter:

$$24 \div 3 = 8$$

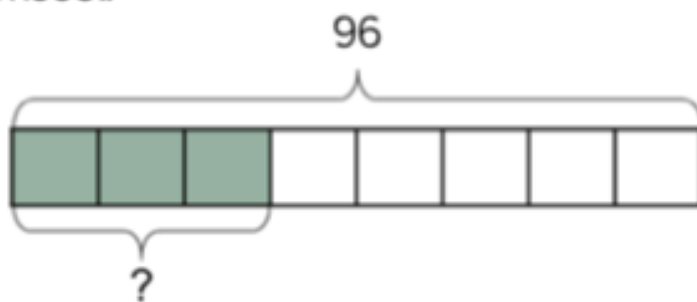
$$8 \times 2 = 16$$

Jack:

$$24 \times 2 = 48$$

$$48 \div 3 = 16$$

Write a problem that matches the bar model.



What other questions could you ask from this model?

Possible response:

There are 96 cars in a car park.

$\frac{3}{8}$  of them are red.

How many cars are red?

How many were not red? etc.

$\frac{7}{16}$  of a class are boys.

There are 18 girls in the class.

How many children are in the class?

There are 32 children in the class.