

ACMNA127

Finding fractions of quantities

Solve these equations. Use a calculator if you need to.

Equation	is the same as:
① $\frac{3}{4}$ of 32	$32 \div 4 \times 3 =$
② $\frac{3}{8}$ of 64	$64 \div 8 \times 3 =$
③ $\frac{7}{9}$ of 99	$99 \div 9 \times 7 =$
④ $\frac{4}{5}$ of 225	$\div \times =$
⑤ $\frac{5}{7}$ of 56	$\div \times =$
⑥ $\frac{2}{3}$ of 123	$\div \times =$
⑦ $\frac{5}{6}$ of 234	$\div \times =$
⑧ $\frac{7}{10}$ of 500	$\div \times =$
⑨ $\frac{3}{8}$ of 760	$\div \times =$
⑩ $\frac{2}{3}$ of 756	$\div \times =$
⑪ $\frac{3}{5}$ of 405	$\div \times =$
⑫ $\frac{6}{9}$ of 873	$\div \times =$
⑬ $\frac{5}{6}$ of 840	$\div \times =$
⑭ $\frac{7}{11}$ of 1782	$\div \times =$
⑮ $\frac{5}{8}$ of 9000	$\div \times =$

Score 2 points for each correct answer! SCORE /30 0-12 14-24 26-30

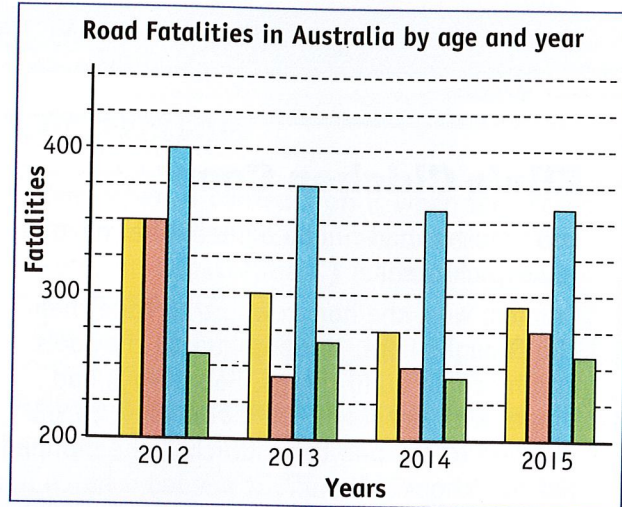
Statistics & Probability

ACMSP147

Using a table and a bar graph

This table and bar graph show road fatalities in Australia over a five year period. They are incomplete and have some errors in them.

Road Fatalities in Australia by age and year				
Age range (years)	2012	2013	A	2015
0-25	350	B	300	290
26-39	300	240	250	275
40-64	C	375	360	375
65+	260	275	240	D

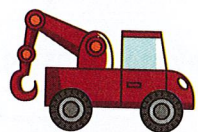


What number should replace each of these labels in the data table? Refer to the graph for the values.

- ① A _____
- ② B _____
- ③ C _____
- ④ D _____

For the following questions, assume the data in the table is correct.

- ⑤ Which age bar in the 2012 group is wrong? _____
- ⑥ Which age bar in the 2013 group is wrong? _____
- ⑦ Which age bar in the 2014 group is wrong? _____
- ⑧ Which age bar in the 2015 group is wrong? _____
- ⑨ By how many is the age bar in the 2012 group wrong? _____
- ⑩ By how many is the age bar in the 2013 group wrong? _____
- ⑪ By how many is the age bar in the 2014 group wrong? _____
- ⑫ By how many is the age bar in the 2015 group wrong? _____



Score 2 points for each correct answer! SCORE /24 0-10 12-18 20-24

Measurement & Geometry

ACMMG141

Right, acute, obtuse and reflex angles

Write how many of each type of angle are inside and outside these shapes.

Square



	① Angles inside shape	② Angles outside shape
Acute		
Right		
Obtuse		
Reflex		

Rectangle



	③ Angles inside shape	④ Angles outside shape
Acute		
Right		
Obtuse		
Reflex		

Triangle



	⑤ Angles inside shape	⑥ Angles outside shape
Acute		
Right		
Obtuse		
Reflex		

Diamond



	⑦ Angles inside shape	⑧ Angles outside shape
Acute		
Right		
Obtuse		
Reflex		

Pentagon



	⑨ Angles inside shape	⑩ Angles outside shape
Acute		
Right		
Obtuse		
Reflex		

Score 2 points for each correct answer! SCORE /20 0-8 10-14 16-20

Problem Solving

ACMNA127, ACMSP147

- ① John divided a bag of Gummi Bears among his four best friends and himself. He gave each friend a sixth of the lollies and kept the rest for himself.

If John kept eight Gummi Bears, how many were in the bag at the start?

- ② Kimiko shared her bag of jelly beans by giving the same number to her six friends and herself. Everyone got eight jelly beans but there were four left over. How many jellybeans were in the bag at the start?

- ③ Jessica had a bag of fifty-six peppermint humbugs. She gave $\frac{1}{8}$ to Kimiko, then she gave $\frac{1}{7}$ of what was left to Malika. Finally she gave $\frac{1}{6}$ of what was left to John. Who got the most peppermint humbugs?

- ④ Miguel gave three of his friends three-quarters of his Freddo Frogs. If he gave ten frogs to his first friend, eight to his second friend and nine to the third, how many Freddo Frogs did he have left?



Use the bar graph in Statistics & Probability to answer these questions.

- ⑤ During one particular year, a very successful Road Safety campaign was held. What year was it and what age group was it aimed at?
- ⑥ If you take $\frac{3}{5}$ of the fatalities for one of the age groups of 2012, it would be very close to the number of fatalities for another age group in 2012. What are the two age groups?
- ⑦ Which age group is overall most in danger of being a victim of road fatality?