

SMART EXAM RESOURCES
TOPIC : NUMBERS
SUB-TOPIC: REVERSE PERCENTAGE
SET-1-QP-MS

1

In 2004 Colin had a salary of \$7200.

- (a) This was an increase of 20% on his salary in 2002.
Calculate his salary in 2002.

Answer(a) \$ [2]

- (b) In 2006 his salary increased to \$8100.
Calculate the percentage increase from 2004 to 2006.

Answer(b) % [2]

MARK SCHEME:

(a)	6000	2*	M1 $7200 \div 1.2$ oe
(b)	12.5	2*	M1 $(8100 - 7200) \div 7200$ oe

2 Amalie makes a profit of 20% when she sells a shirt for \$21.60.

Calculate how much Amalie paid for the shirt.

Answer \$ [2]

MARK SCHEME:

18	2	M1 for $21.6 \div 1.2$ oe
----	---	----------------------------------

3

A student played a computer game 500 times and won 370 of these games.
He then won the next x games and lost none.
He has now won 75% of the games he has played.
Find the value of x .

Answer $x =$ [4]

MARK SCHEME:

20	4	B1 $\frac{370 + x}{500 + x} = \frac{3}{4}$ oe fraction, decimal, percentage M1 two moves completed correctly M1 two more correct moves completed
----	---	---

4

Amalie makes a profit of 20% when she sells a shirt for \$21.60.

Calculate how much Amalie paid for the shirt.

Answer \$ [2]

MARK SCHEME:

18	2	M1 for $21.6 \div 1.2$ oe
----	---	----------------------------------

5

The table shows the opening and closing times of a café.

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Opening time	0600	0600	0600	0600	0600	(a)	0800
Closing time	2200	2200	2200	2200	2200	2200	1300

- (a) The café is open for a total of 100 hours each week.
Work out the opening time on Saturday.

Answer(a) [2]

- (b) The owner decides to close the café at a later time on Sunday. This increases the **total** number of hours the café is open by 4%.
Work out the new closing time on Sunday.

Answer(b) [1]

MARK SCHEME:

(a) (0)700 or 7 am	2	M1 $100 - (5 \times \text{their}(22 - 6) + \text{their}(13 - 8))$ or better soi
(b) 1700 or 5 pm	1	