

Rates and Proportions

ACMNA208 – Assessment



Name: _____

Score: _____

Teacher: _____



Assessment



Navigator



Student



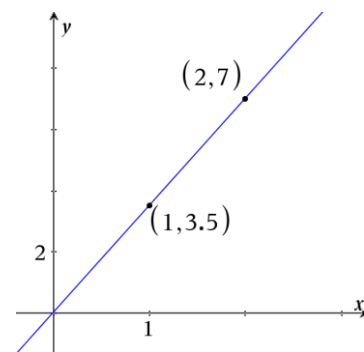
30 min

Q.1. Concert tickets cost \$50 per person. The total takings in dollars from 120 concert goers is found using:

- a) 120×50 b) $120 \div 50$ c) $50 \div 120$ d) $50 + 120$ e) $120 - 50$

Q.2. The rule for the graph opposite is:

- a) $y = \frac{7}{2}x$ b) $y = \frac{1}{2}x$
c) $y = 2x$ d) $y = \frac{1}{7}x$
e) $y = x + 2$



Q.3. The height difference of each level in a building is 3.5 m. A lift stops on the fourth floor. The approximate height (h) in metres of the floor of the lift is:

- a) 3.5 b) 14 c) 17.5 d) 21.0 e) 35

Q.4. The cable on a stationary lift breaks. The lift increases its speed by 2m/s each second as it falls. If it falls for a period of 6 seconds, its speed when it reaches the ground would be:

- a) 10 b) -10 c) 3 d) 12 e) 0

Q.5. A car can travel 20 km on 2.5 litres of fuel. How far can it travel on 50 litres?

- a) 520 b) 1000 c) 800 d) 400 e) 300

Q.6. A cleaning company has tendered to clean the six lifts in a building. If each lift has 24m^2 of surface to be cleaned and it costs \$5 a square metre for cleaning the total cost (\$) is

- a) 120 b) 150 c) 288 d) 300 e) 720

Q.7. If 10 kg of potatoes cost \$10.90. The number of kilograms of potatoes you get for \$18 is:

- a) $\frac{18}{1.09}$ b) $\frac{18}{10.9}$ c) 18×10.9 d) 18×1.09 e) $10 + \frac{18}{10.9}$

Q.8. A family visits some friends who live 850 km away. On Day 1 they travel 400km in 5.5 hours. How long will it take them on Day 2 to reach their destination if they travel at the same rate?

- a) 11.7 hours b) 6 hours c) 6.2 hours d) 6.4 hours e) 6.5 hours

Q.9. Use the table to determine the rule: $y = mx$

The value of m and p (table) respectively are

x:	0	1.5	3	12
y:	0	12	p	96

- a) $m = 3$
 $p = 84$ b) $m = 12$
 $p = 42$ c) $m = 8$
 $p = 24$ d) $m = 24$
 $p = 8$ e) $m = 8$
 $p = 42$

Q.10. The rule for the graph opposite is:

- a) $y = -2x + 6.4$ b) $y = (x - 2) + 6.4$
c) $y = 3.2x$ d) $y = \frac{1}{2}x + 6.4$
e) $y = -3.2x$

