

**Leith Academy Maths Department**  
**National 4 Numeracy**  
**Practice Assessment 2**

1) Copy and complete the table filling in the missing value.

| Distance  | Speed    | Time       |
|-----------|----------|------------|
|           | 30 mph   | 3 hours    |
| 45 km     |          | 5 hours    |
| 245 miles | 70 mph   |            |
|           | 8 m/s    | 19 seconds |
| 1575 km   | 420 km/h |            |
| 12 km     |          | 15 minutes |

2) A runner runs at an average speed of 8 miles per hour. How far can he run in  $2\frac{1}{2}$  hours?

3) A plane takes off at 1020 and flies a distance of 2760 miles at an average speed of 480 miles per hour. What time will the plane land?

4) Divide the following amounts by the given ratio.

a) 40 by the ratio 3:2

b) 64 by the ratio 5:3

c) 49 by the ratio 5:2

d) 121 by the ratio 7:4

e) 216 by the ratio 4:5

f) 364 by the ratio 9:4

5) The ratio of boys to girls in a school is 8:9 and there are 816 pupils enrolled at the school. Ben believes there are 432 boys at the school. Is he correct?

6) At a football match the ratio of adults to children is 9:4. If there are 32103 adults at the football match, how many children are there?

7) Calculate the following.

a)  $4 - 9$

b)  $-2 - 7$

c)  $3 + (-11)$

d)  $-6 + (-9)$

e)  $4 - (-8)$

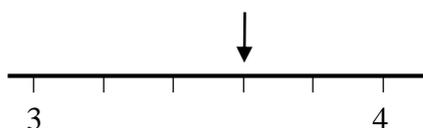
f)  $-3 - (-14)$

8) If the current temperature is  $5^{\circ}\text{C}$  and it drops by  $11^{\circ}\text{C}$ , what is now the temperature?

9) If the current temperature is  $-12^{\circ}\text{C}$  and it rises by  $9^{\circ}\text{C}$ , what is now the temperature?

10) Write down the reading on these scales.

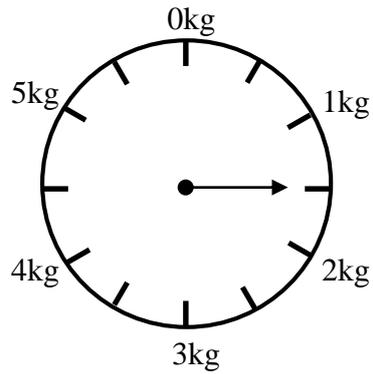
a)



b)



11) The scales show the current weight of an item.



How much more weight is needed to increase the total weight to 5 kg?

12) Measure these lines.

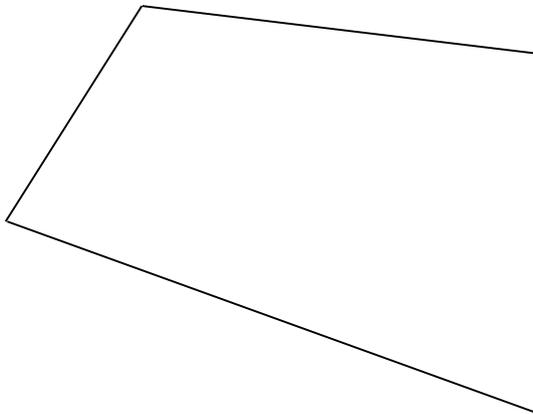
a)



b)



13a) Measure all the angles in the shape below.



b) Add up all the angles and make a conjecture about the total of all 4 angles of a quadrilateral.