

Monday

Power up answers

£2045

6320 m tall

24p each

→ pages 72–74


- Max must wait 2 hours and 25 minutes.
  - Jen watches TV for 50 minutes.
  - Viewers must wait 10 full weeks.
- The teacher makes 21 appointments.
  - The last appointment on Wednesday ends at 19:55.
- Olivia raises £40.
- 12 intervals of 45 minutes = 9 hours, which is longer than one third of a day (8 hours).
- 2,904 hours = 121 days
  - The puppy was born on 17 June.

Reflect

10 minutes past 10; 22:10; 10:10 pm

Tuesday

Power up answers

 **Answers:**

$$25 \div 4 = 6.25$$

$$43 \div 5 = 8.6$$

$$39 \div 6 = 6.5$$

$$74 \div 5 = 14.8$$

$$58 \div 8 = 7.25$$

$$65 \div 2 = 32.5$$

$$135 \div 6 = 22.5$$

$$231 \div 4 = 57.75$$

$$362 \div 5 = 72.4$$

→ pages 75–77

1. a) The journey on the 16:12 bus is 3 minutes shorter.  
b) It is quicker for Max to walk.
2. Children spend 4 hours 15 minutes longer in lessons.
3. a) He travelled 125 km.  
b) The break was 1 hour 15 minutes long.  
c) He stopped for lunch at 1:05 pm (13:05).
4. Taxi company A will be the cheapest. A is 60p a minute, so £18; B is 15 minutes for £9.75 so £19.50 for 30 mins; C is 64p per minute (or £3.20 for 5 minutes) so £19.20 for 30 minutes.

**Reflect**

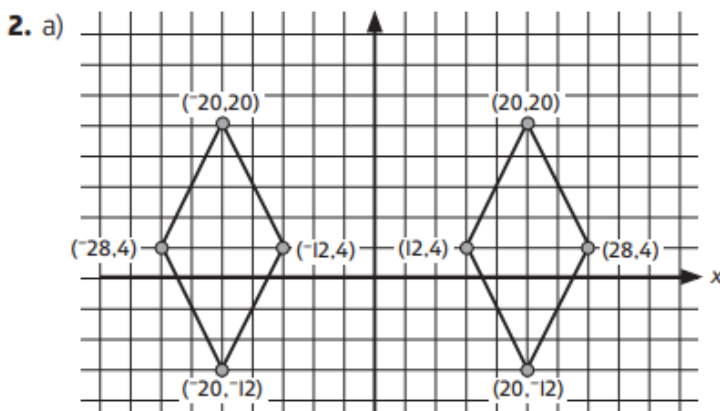
She has used column addition forgetting that there are 60 mins in an hour, not 100. The correct time is 1:40 (13:40).

**⚡ Answers:**

$339 \div 15 = 22.6$        $285 \div 12 = 23.75$        $764 \div 16 = 47.75$   
 $570 \div 24 = 23.75$        $312 \div 15 = 20.8$        $782 \div 25 = 31.28$

**→ pages 78–80**

1. B(-1,5)  
D(3,1)



b) (12,4), (20,20), (20,-12) and (28,4)

3. a) A(12,14)  
B(12,2)  
C(19,2)  
b) (12,8)  
c) Circled: (16,12)
4. (-1,4); (2,-5); (-1,5); (-4,-4)

**Reflect**

Add each part of the coordinate then divide by 2.  
 $7 + 7 = 14$ ;  $14 \div 2 = 7$ ;  $2 + 10 = 12$ ,  $12 \div 2 = 6$ .  
 The half-way point is (7,6).

Some children will notice that the x-coordinate will be 7 as well, as the line is horizontal, parallel to x-axis.

**⚡ Answers:**

There will be 1.75 kg of apples in each pie.  
 There will be 6.75 m of wire for each house.

→ pages 81–83

1.  $a = 30^\circ$ ,  $b = 42^\circ$ ,  $c = 68^\circ$ ,  $d = 68^\circ$
2. a)  $a = 55^\circ$ ,  $b = 35^\circ$   
b) Answers will vary; for example:  $c = 180^\circ - 35^\circ$   
(angle  $b$ ) =  $145^\circ$ ,  $d = c$  (opposite angles).
3. angle  $x = 28^\circ$ , angle  $y = 100^\circ$ , angle  $z = 52^\circ$
4. angle  $x = 100^\circ$ , angle  $y = 60^\circ$ , angle  $z = 200^\circ$
5. angle  $a = 40^\circ$ , angle  $b = 140^\circ$ , angle  $c = 40^\circ$


**Reflect**

Answers will vary.

Angles  $b + c = 92^\circ$  ( $180 - 88$ ). For example:  $46^\circ$  and  $46^\circ$ ;  
 $80^\circ$  and  $12^\circ$ .

Friday

Power up answers

 **Answers:**

There will be 1.52 litres of squash for each child.

Each person receives £35.75.

- External angle is  $360^\circ \div \text{number of sides}$ ;  $360 \div 8 = 45$   
or internal angle sum:  $6 \times 180 = 1,080$ ;  $1,080 \div 8 = 135$ ;  
 $180 - 135 = 45$   
 $m = 45^\circ$
- Shapes in the wrong place: trapezium, rhombus, regular pentagon and regular hexagon.

	Interior angles add up to $360^\circ$	Interior angles do not add up to $360^\circ$
Have at least one pair of parallel sides	rectangle parallelogram	rhombus regular pentagon
Have no pairs of parallel sides	kite trapezium	triangle regular hexagon

- Internal angle of hexagon =  $120^\circ$ ,  $3 \times 120^\circ = 360^\circ$
- angle a =  $120^\circ$  (adjacent angles in parallelogram =  $180^\circ$  or opposite angles are equal), angle b =  $47^\circ$   
(internal angles in a pentagon =  $108^\circ$ ; angles round a point =  $360^\circ$ )
- angle e =  $80^\circ$ , angle f =  $40^\circ$

## Reflect

A regular pentagon has 5 angles each of  $108^\circ$ .  
 $330 \div 3 = 110^\circ$ , not 108. Alternatively: all angles must be equal in regular shapes:  $330 \div 3 = 110^\circ$ , leaving only  $210^\circ$  for the other two angles, not enough for both to be  $110^\circ$  (angle sum of pentagon =  $3 \times 180 = 540$ ).

## End of unit check

### My journal

He will save £7,776.

Children need to find 25% and  $\frac{3}{10}$  of 1,200 to find how much is left (540) then split into the ratio 3 : 2 to find out how much he saves each month ( $540 \div 5 = 108$ ;  
 $2 \times 108 = 216$  saved) then multiply by the number of months:  $216 \times 36 \text{ months} = 7,776$