

Advance Homework 6 Answers

How Star Wars Changed Moviemaking Forever

- Answers will vary.
- Many new special effects were created for *Star Wars*, and the company that created them continues to work on movies today. *Star Wars* was so popular, it set box office records and made a lot of money for movie-theatre owners. Owners built more screens and theatres, including the multiplexes we have today, and more people made different types of movies to show on all the new screens.
- Inventors have even tried to create some of the things you see in the movies, including the hologram images and the huge AT-AT robots.
- The director is George Lucas.
- R2-D2 and C-3PO are robots from *Star Wars*. ASIMO and REEM-A are real-life robots.
- Movie robots are smarter than real-life robots and can do many things. For example, C-3PO looked and behaved like a human and was programmed to speak many languages.

- c
- b
- b
- c
- Answers will vary.

- c
- b
- a
- b
- Answers will vary.
- Answers will vary.

1 Let Ayesha has $6x$ sweets

Number of sweets with Neelsh = $\frac{1}{6} \times 6x = x$

According to the question, $x - 1 = 4$
 $\Rightarrow x = 5$

Total sweets with Ayesha = $6 \times 5 = 30$

Number of sweets left with Ayesha = $30 - 5 = \underline{25}$

2 No. of children playing recorder = $36 \times \frac{1}{3} = 12$

No. of children who play the triangle = $36 \times \frac{25}{100} = 9$

No. of children playing something else = $36 - 12 - 9 = \underline{15}$

3 To find the original number perform inverse operations in reverse order.

$$49 - 7 = 42$$

$$42 \div 2 = 21$$

Thus the original number is 21

4 Cost of two adult tickets = $2 \times 3.50 = \text{€}7$

Cost of three child tickets = $3 \times 1.70 = \text{€}5.10$

Total cost $\Rightarrow \text{€}7 + \text{€}5.10 = \text{€}12.10$

Change $\Rightarrow 20 - 12.10 = \underline{\text{€}7.90}$

5 €1200
€800
 Ben

Sale price of the bed = $(1 - 0.25) \times 1600 = \underline{\text{€}1200}$

Original price of the bed = $\frac{600}{0.75} = \underline{\text{€}800}$

Sale price in percentage = $0.75 \times 0.8 \times 100 = 0.6 \times 100 = 60\%$

Overall reduction = 40%

Ben is right

6 Score in a 10-problem test = $0.3 \times 10 = 3$

Score in a 20-problem test = $0.7 \times 20 = 14$

Score in a 30-problem test = $0.8 \times 30 = 24$

Total score in a combined test = $3 + 14 + 24 = 41$ out of 60

percentage of score = $\frac{41}{60} \times 100 = \underline{68.33\%}$

- 7 Number of boys with soccer colours = 5×10 boys = 50 boys
 Number of boys who play soccer = 4×50 boys = 200 boys
 Number of boys in school = 3×200 boys = 600 boys
 Number of pupils in school = $2 \times 600 = \underline{1200}$ pupils

8

$$\text{Time} = \frac{\text{Distance}}{\text{speed}} = \frac{20 \text{ hr}}{5}$$

$$= 4 \text{ hours}$$

$$\text{Distance} = \text{speed} \times \text{time}$$

$$= 4 \times 4$$

$$= 16 \text{ km}$$

She still needs to walk when Julie finishes

$$= 20 - 16$$

$$= 4 \text{ km}$$

9

$$\text{Fraction of removed area} = \frac{3}{8} \text{ of Square piece of card}$$

$$\text{Fraction of remaining area} = 1 - \frac{3}{8}$$

$$= \frac{5}{8}$$

NVR

Q1) d

All the short lines are extended to reach the other large shape. The number of lines stays the same.

Q2) a

The shapes that sit inside the middle shape move outside the shape, while the shapes that sit outside the middle shape move inside.

Q3) c

The black shapes are cut out of the white shape, and the large white shape turns black.

Q4) b

The shape on the right is an enlarged version of the bottom left quadrant of the original shape.

Q5) a

The black shape moves inside the largest shape and turns white. The whole image is mirrored horizontally.

Q6) e

The large shape in the middle disappears. The black shapes are replaced by smaller versions of the large shape.

Q7) e

The rectangles are placed from the bottom-up in order of how many shapes are inside the rectangle.

Q8) b

The top and bottom rectangular shapes are mirrored. The entire shape between the two rectangles appears next to the original shape, except it has been rotated 180 degrees.

Q9) c

The whole shape is mirrored horizontally. The vertical-pointing arrows change to the opposite direction. The horizontal-pointing arrows are mirrored with the rest of the shape.

Q10) a

The large shape is mirrored vertically. The number of black shapes is halved, and these shapes move to the middle.

The number of white shapes is doubled, and the white shapes move to the perimeter of the large shape.

Verbal Reasoning

- 1) GS 2) PV 3) BZ 4) CZ 5) NL 6) BE 7) VW 8) HV 9) RK 10) IE 11) JJ 12) RN 13) IO 14) UL
 15) IH 16) UB 17) BK 18) MG 19) IS 20) OB