

MINISTRY OF EDUCATION

BADAA AL MUTAWA SCHOOL

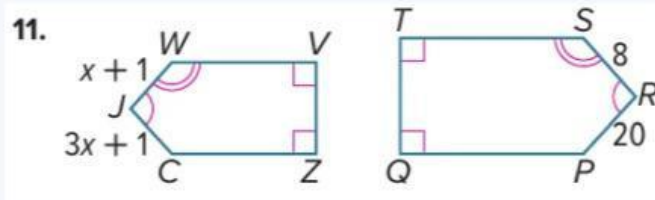
MATHEMATICS • M3L2 – Similar Polygons

Student Name: _____	Subject: Mathematics
Grade: _____	Subject Teacher: Abdulkader Amro
Date: _____	Assessment Type: Multiple Choice

Instructions: Choose the one correct answer for each question. Use the diagrams where provided.

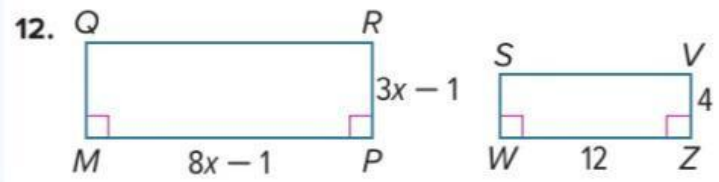
SECTION A • SIMILAR POLYGONS

1. Each pair of polygons is similar. Find the value of x . [Source Q11]



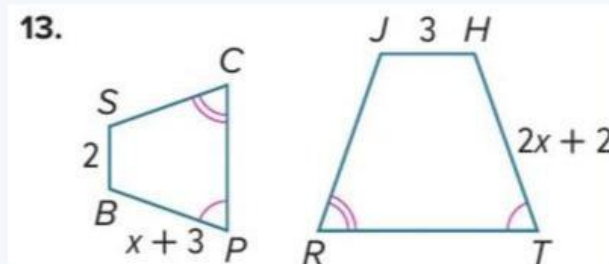
- A. 2
B. 4
C. 3
D. 5

2. Each pair of polygons is similar. Find the value of x . [Source Q12]



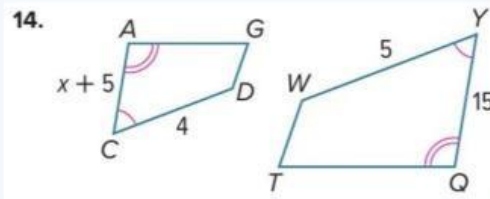
- A. 2
B. 3
C. 1
D. 4

3. Each pair of polygons is similar. Find the value of x . [Source Q13]



- A. 4
B. 5
C. 6
D. 7

4. Each pair of polygons is similar. Find the value of x . [Source Q14]



- A. 6
C. 8
B. 7
D. 9

5. GAMING — On a map, home to the health food store is 2 cm, the health food store to the first dungeon is 8 cm, and the first dungeon to home is 7 cm. If the actual health-food-store-to-dungeon distance is 4 km, how far will the character travel to visit all three destinations? [Source Q15]

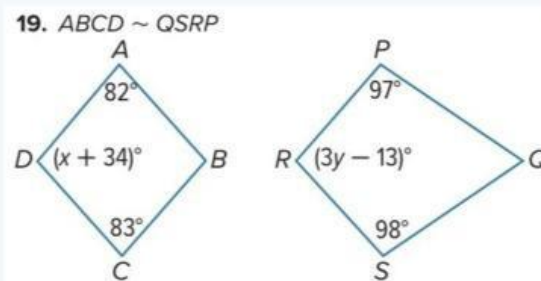
- A. 7.5 km
C. 8.5 km
B. 8 km
D. 9 km

6. LAWN CARE — Nayeli's rectangular lawn has a perimeter of 126 meters. The ratio of length to width is 5:2. What is the width of Nayeli's lawn? [Source Q16]

- A. 18 m
C. 20 m
B. 15 m
D. 21 m

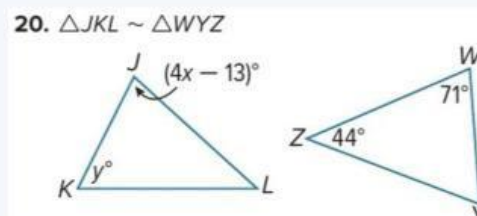
SECTION B • FIND x AND y IN SIMILAR FIGURES

7. $ABCD \sim QSRP$. Find the values of x and y . [Source Q19]



- A. $x = 63, y = 31$
C. $x = 63, y = 30$
B. $x = 61, y = 32$
D. $x = 63, y = 32$

8. $\triangle JKL \sim \triangle WYZ$. Find the values of x and y . [Source Q20]



- A. $x = 20, y = 65$
C. $x = 21, y = 64$
B. $x = 21, y = 65$
D. $x = 22, y = 65$

9. If $\triangle ABC \sim \triangle DEC$, find x and the scale factor from $\triangle DEC$ to $\triangle ABC$. [Source Q22]

22. If $\triangle ABC \sim \triangle DEC$, find the value of x and the scale factor from $\triangle DEC$ to $\triangle ABC$.



A. $x = 4$; scale factor = $5/4$

B. $x = 3$; scale factor = $4/5$

C. $x = 4$; scale factor = $4/5$

D. $x = 5$; scale factor = $5/4$

10. Rectangle $ABCD \sim$ rectangle $EFGH$. The perimeter of $ABCD$ is 54 cm and the perimeter of $EFGH$ is 36 cm. What is the scale factor from $EFGH$ to $ABCD$? [Source Q23]

A. $2/3$

B. $4/3$

C. $3/2$

D. $5/3$