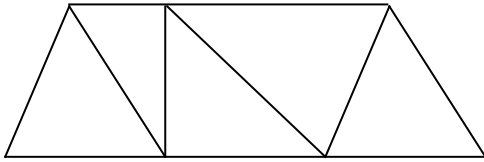


Grade 7 Unit 8 Pt 1 Sample Test

Multiple Choice

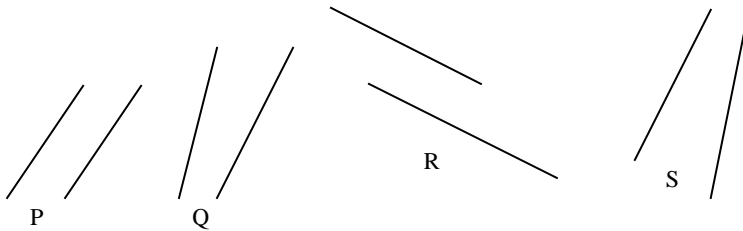
Identify the choice that best completes the statement or answers the question.

- ___ 1. How many pairs of parallel line segments are in this diagram?



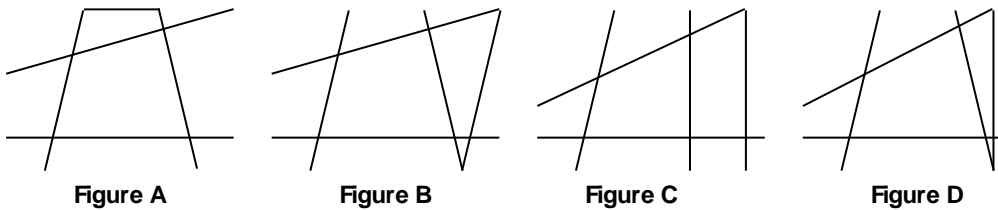
- a. 4 b. 2 c. 3 d. 1

- ___ 2. Which pairs of line segments in this diagram are parallel?



- a. P and S b. P and R c. P and Q d. Q and S

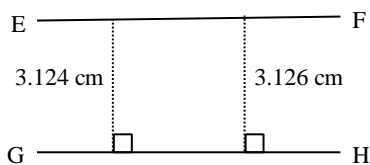
- ___ 3. Which diagrams do not have perpendicular line segments?



- a. Figures A and B c. Figures A, B, and C
b. all of these d. Figures B, C, and D

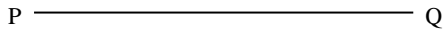
Short Answer

4. Is line segment EF parallel to line segment GH? How do you know?

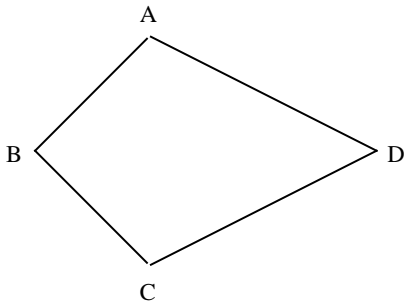


5. Use paper folding to construct 2 lines perpendicular to line segment PQ.

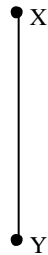
Are the 2 fold lines parallel? How do you know?



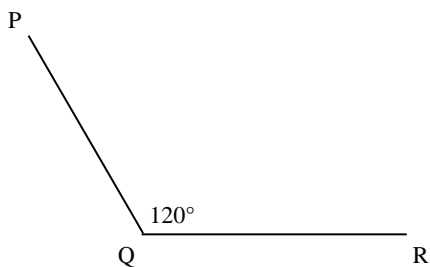
6. Quadrilateral ABCD is a kite. Draw the diagonals BD and AC.
Are the diagonals perpendicular?
Explain how you can check that the diagonals are perpendicular.



7. Construct and label the perpendicular bisector of line segment XY.



8. Construct an angle bisector of this diagram. (Note in the test the angle is not given you will need to measure it first. You will use the method shown in class not the method in the answer section of this test.)



Grade 7 Unit 8 Pt 1 Sample Test Answer Section

MULTIPLE CHOICE

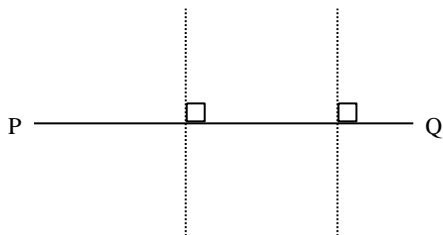
1. ANS: C PTS: 1 DIF: Easy REF: 8.1 Parallel Lines
LOC: 7.SS3 TOP: Shape and Space (3-D Objects and 2-D Shapes)
KEY: Conceptual Understanding
2. ANS: B PTS: 1 DIF: Easy REF: 8.1 Parallel Lines
LOC: 7.SS3 TOP: Shape and Space (3-D Objects and 2-D Shapes)
KEY: Conceptual Understanding
3. ANS: A PTS: 1 DIF: Difficult REF: 8.2 Perpendicular Lines
LOC: 7.SS3 TOP: Shape and Space (3-D Objects and 2-D Shapes)
KEY: Conceptual Understanding

SHORT ANSWER

4. ANS:
No, the 2 line segments are not the same distance apart.

PTS: 1 DIF: Easy REF: 8.1 Parallel Lines
LOC: 7.SS3 TOP: Shape and Space (3-D Objects and 2-D Shapes)
KEY: Communication

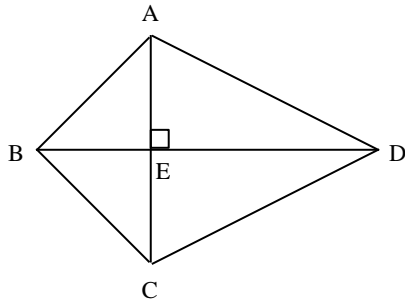
5. ANS:
Both fold lines intersect line segment PQ at right angles.



They are the same distance apart, so the 2 fold lines are parallel.

PTS: 1 DIF: Easy REF: 8.2 Perpendicular Lines
LOC: 7.SS3 TOP: Shape and Space (3-D Objects and 2-D Shapes)
KEY: Communication

6. ANS:



Yes, the diagonals are perpendicular.

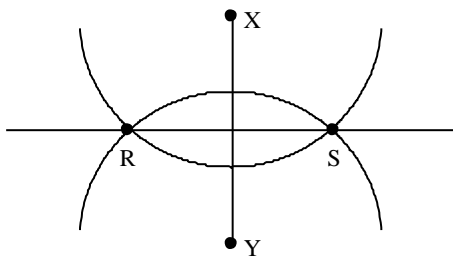
Methods may vary. For example:

You can use a protractor to check if $\angle AED$ is 90° .

Or, place the base of a plastic right triangle along ED and check if AE coincides with the height of the plastic triangle.

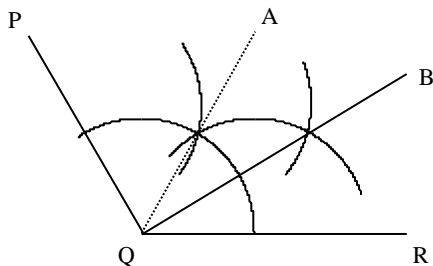
PTS: 1 DIF: Moderate REF: 8.2 Perpendicular Lines
 LOC: 7.SS3 TOP: Shape and Space (3-D Objects and 2-D Shapes)
 KEY: Procedural Knowledge | Communication

7. ANS:
 Line segment RS bisects line segment XY.



PTS: 1 DIF: Moderate REF: 8.3 Constructing Perpendicular Bisectors
 LOC: 7.SS3 TOP: Shape and Space (3-D Objects and 2-D Shapes)
 KEY: Procedural Knowledge | Communication

8. ANS:
 Diagrams may vary. For example:



First construct the bisector of $\angle PQR$.
 Then, construct the bisector of $\angle AQR$.
 $\angle PQB = 90^\circ$

PTS: 1 DIF: Moderate REF: 8.4 Constructing Angle Bisectors
 LOC: 7.SS3 TOP: Shape and Space (3-D Objects and 2-D Shapes)

KEY: Procedural Knowledge | Communication