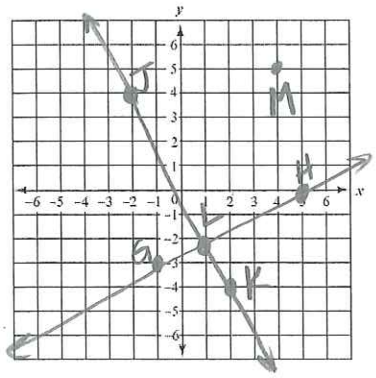
Geometry Review 1.1 – 1.3 Name: Answer Key

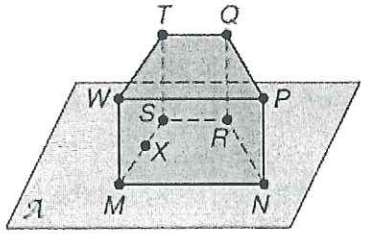
#1-7 Define the following terms using COMPLETE SENTENCES.

1. Collinear: Points are collinear if they all lie on the same line.
2. Congruent: If shapes are congruent that means they have the same measure
3. Midpoint: A midpoint is a point that is halfway between the endpoints of a segment.
4. Coplanar: If points are coplanar, then they all lie on the same plane.
5. Line: A line is made up of points and goes on forever.
6. Plane: A plane is a flat surface that extends indefinitely in all directions.
7. Point: A point is a location.

8. Lines $\overleftrightarrow{GH}$ and $\overleftrightarrow{JK}$ intersect at point *L* for *G*(-1, -3), *H*(5, 0), *J*(-2, 4), and *K*(2, -4). Point *M* is coplanar with the points, but not collinear with $\overleftrightarrow{GH}$ or $\overleftrightarrow{JK}$. Graph $\overleftrightarrow{GH}$ and $\overleftrightarrow{JK}$, and points *L* and *M*.

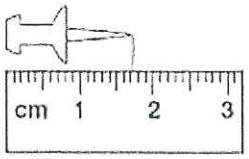


Refer to the figure at the right for #9-12.



9. How many planes are shown in the figure? 6
10. Name three collinear points. S X M
11. Name four points that are coplanar. S R M N
12. Name one plane in this picture. Plane A
13. Name a line that intersects $\overline{WM}$. $\overline{MN}$

14. Find the length of the pushpin.

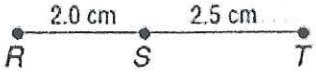


1.7 cm

17 mm

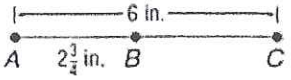
For #15 and 16 find the length of each segment given.

15. $\overline{RT}$



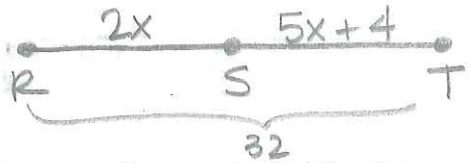
$2+2.5 = \boxed{4.5\text{ cm}}$

16. $\overline{BC}$



$6 - 2\frac{3}{4} = \boxed{3\frac{1}{4}\text{ in}}$

17. Point *S* is between points *R* and *T*. If *RS* = 2*x*, *ST* = 5*x* + 4, and *RT* = 32, find the length of *x* and the length of *ST*.



$2x + 5x + 4 = 32$

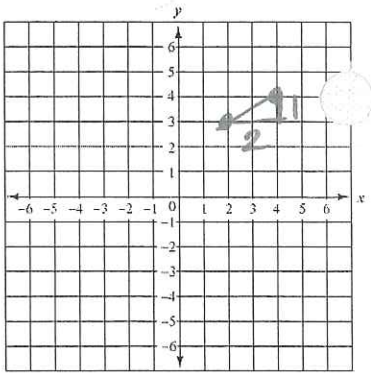
$7x + 4 = 32$

$7x = 28$

$\boxed{x = 4}$

$\boxed{ST = 24}$

18. Use the Pythagorean Theorem to find the distance between (2, 3) and (4, 4).



$2^2 + 1^2 = c^2$

$4 + 1 = c^2$

$\boxed{\sqrt{5} = c}$

19. Use the Distance Formula to find the distance between (-2, 2) and (5, 2).

$\sqrt{(5+2)^2 + (2-2)^2}$

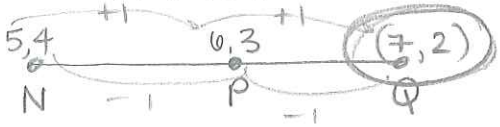
$\sqrt{7^2 + 0^2} = \sqrt{49} = \boxed{7}$

20. Find the midpoint of $\overline{NQ}$ using the points N(2, 0) and P(5, 2).

$\left(\frac{2+5}{2}, \frac{0+2}{2}\right) = (3.5, 1)$

For # 21 and #22 Find the coordinates of the missing endpoint given that P is the midpoint of $\overline{NQ}$.

21. *N*(5, 4), *P*(6, 3)



22. *Q*(3, 9), *P*(-1, 5)