James Ding - Geo - Sept. 9, 2019

1-1

- Undefined Terms
  - Points, Lines, Planes
- Collinear/Coplanar Points
- Defined Terms
  - Segments, Rays, Opposite Rays
- Intersections

1-2

- Ruler Postulate
- Copying Segments
- Congruent symbol: ≅
- Segment Addition Postulate

1-3

- Midpoints
- Segment Bisectors
- Bisecting a segment
- Midpoint Formula
- Distance Formula

1-4

- Classifying Polygons
- Area/Perimeter of Polygons

1-5

- Angles, Vertices, Sides
- Interior/Exteriors of Angles
- Protractor Postulate
- Acute, Right, Obtuse, Straight angles
- Copying Angles
- Angle Addition Postulate
- Bisecting Angles

1-6

- Complementary/Supplementary Angles
- Adjacent Angles
- Common vertices/sides
- Linear Pairs
- Vertical Angles
- Interpreting Diagrams

Classwork/Homework - Page 56-58 #8-22 E

8. $AX + XZ = AZ$	Segment Addition Pros
$27 + XZ = 38$	Substitute
$XZ = 11$	Simplify

10. $(\frac{x_2+x_1}{2}, \frac{y_2+y_1}{2})$	Midpoint Formula
$(\frac{-2+3}{2}, \frac{4+9}{2})$	Substitute
$(\frac{1}{2}, 6.5)$	Simplify

$\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$	Distance Formula
$\sqrt{(-2-3)^2 + (4-9)^2}$	Substitute
$\sqrt{50}$	Simplify
$ST \approx 7.071$	

12. $(\frac{x_2+x_1}{2}, \frac{y_2+y_1}{2})$	Midpoint Formula
$(\frac{14+x_1}{2}, \frac{9+y_1}{2})$	Substitute
$6 = \frac{14+x}{2}$	Substitute
$12 = 14 + x$	Simplify
$x = -2$	Simplify
$3 = \frac{9+y}{2}$	Substitute
$6 = 9 + y$	Simplify
$y = -3$	Simplify

$83 + m\angle 2 = 90$ Substitute
$m\angle 2 = 17$ Simplify

14. $ZX = |x_2 - x_1|$ Ruler Postulate
$ZX = |2 - 5|$ Substitute
$ZX = 3$ Simplify

$XW = |y_2 - x_1|$ Ruler Postulate
$XW = |6 - (-1)|$ Substitute
$XW = 7$ Simplify

$2l + 2w =$ Perimeter
$2(XW) + 2(ZX) =$ Substitute
$2(7) + 2(3) =$ Substitute
20 units Simplify

$l \cdot w =$ Area
$XW \cdot ZX =$ Substitute
$7 \cdot 3 =$ Simplify
21units^2 Simplify

16. $m\angle ABC = m\angle ABD + m\angle DBC$ SAP
$77 = 3x + 22 + 5x - 17$ Substitute
$77 = 8x + 5$ Simplify
$72 = 8x$ Simplify
$x = 9$

$m\angle ABD = 3x + 22$
$m\angle ABD = 3(9) + 22$ Substitute
$m\angle ABD = 49$ Simplify

$m\angle DBC = 5x - 17$
$m\angle DBC = 5(9) - 17$ Substitute
$m\angle DBC = 28$ Simplify

18. 134

20. $m\angle 1 + m\angle 2 = 90$ SAP

22. $m\angle 3 + m\angle 4 = 180$ SAP
$56 + m\angle 4 = 180$ Substitute
$m\angle 4 = 124$