

## Geometry Honors Unit 6 Review Answers

- C
- AF  $AB = 4, AC = 7, BC = \sqrt{65}$
- BD  $\angle A = 45^\circ \angle B = 45^\circ \angle C = 90^\circ$
- AE
- Right Isosceles
- Equilateral and Equiangular
- Obtuse Scalene
- $x = 4.\bar{3}$
- $x = 12.5, w = \frac{6}{7}$
- No,  $\angle C \cong \angle A$ , thus all 3 angles are congruent which correlates to 3 congruent sides
- 12
- $y = -2x - 4, \text{midpoint } (-4, 4)$

- $x = -8 \quad QR = 20$
- $x = 10 \quad EF = 50$
- $a = 8, b = 0, \text{sum} = 8$
- A, No  $AB = 5\sqrt{2} \quad BC = 2\sqrt{5} \quad AC = 3\sqrt{2} \quad XY = \sqrt{61},$   
 $YZ = 4\sqrt{5}, XZ = \sqrt{13}$
- AC
- BCD
- B
- E
- YES, SAS
- YES, ASA
- YES, SSS
- NO, No Donkeys!

25)

Statements	Reasons
(1) N is the midpoint of $\overline{AB}$	(1) Given
(2) $\overline{NX} \cong \overline{BY}$	(2) Given
(3) $\overline{AX} \cong \overline{NY}$	(3) Given
(4) $\overline{AN} \cong \overline{NB}$	(4) Definition of a Midpoint
(5) $\triangle XAN \cong \triangle YNB$	(5) SSS (2, 3, 4)

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Statements	Reasons
(1) $\overline{RT} \cong \overline{RV}$	(1) Given
(2) $\overline{TS} \cong \overline{VS}$	(2) Given
(3) $\overline{RS} \cong \overline{RS}$	(3) Reflexive
(4) $\triangle RST \cong \triangle RVS$	(4) SSS
(5) $\angle TRS \cong \angle VRS$	(5) CPCTC

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Statements	Reasons
(1) $\overline{BV}$ bisects $\angle EBO$	(1) Given
(2) $\overline{BV}$ bisects $\angle EVO$	(2) Given
(3) $\angle 3 \cong \angle 4$	(3) Definition of an angle bisector
(4) $\angle 1 \cong \angle 2$	(4) Definition of angle bisector
(5) $\overline{BV} \cong \overline{BV}$	(5) Reflexive Property
(6) $\triangle BEV \cong \triangle BOV$	(6) ASA

28)

Statements	Reasons
(1) $\overline{TP} \perp \overline{AS}, \overline{AP} \cong \overline{SP}$	(1) Given
(2) $\angle ATP$ AND $\angle STP$ are right angles	(2) Definition of perpendicular lines
(3) $\triangle ATP$ and $\triangle STP$ are right triangles	(3) Right triangles have one right angle
(4) $\overline{TP} \cong \overline{TP}$	(4) Reflexive Property
(5) $\triangle ATP \cong \triangle STP$	(5) HL