

## Answers for Lesson 7-2, pp. 375–378 Exercises

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1.  $\angle JHY$
2.  $\angle R$
3.  $\angle JXY$
4.  $HY$
5.  $JT$
6.  $HY$
7. no;  $\frac{20}{30} \neq \frac{36}{52}$
8. yes;  $QRST \sim XWZY; \frac{3}{4}$
9. yes;  $KLMJ \sim PQNO; \frac{3}{5}$
10. yes;  $ABCD \sim FGHE; \frac{4}{5}$
11. No; corr.  $\angle$ s are not  $\cong$ .
12. yes;  $\triangle ABC \sim \triangle FED; \frac{7}{5}$
13.  $x = 4; y = 3$
14.  $x = 20; y = 17.5; z = 7.5$
15.  $x = 16; y = 4.5; z = 7.5$
16.  $x = 6; y = 8; z = 10$
17. 6.6 in. by 11 in.
18. 3.6 in. by 6 in.
19. 70 mm
20. 54 in. by 87.37 in.
21. 2 : 3
22. 3 : 2
23. 50
24. 50
25. 70
26.  $\frac{2}{3}$
27. 7.5 m
28. 5.6 m
29. Yes; corr.  $\angle$ s are  $\cong$  and corr. sides are proportional with a ratio of 1 : 1.
30. equal sign, similarity symbol; Answers may vary.  
Sample:  $\cong$  figures are similar with = areas.
31. C
32.  $x = 60, y = 25$
33. 2.6 cm
34. 3 : 4
35. 3 : 1
36. 2 : 1
37. 1 : 2
38. 4 : 3
39. 2 : 3
40. sides of 2 cm;  $\angle$ s of  $60^\circ$  and  $120^\circ$

