

Geometry: Solutions to “blank” problems on the review packet.

3. Always 6. Always 9. Always 12. Sometimes 13. Always

16. *Converse*: False, counterexample $x = 10$ (for example).
Inverse: False, counterexample $x = 7$ (for example).
Contrapositive: True

17. $A, B,$ and C are collinear if and only if the slope of \overline{AB} is the same as the slope of \overline{BC} .

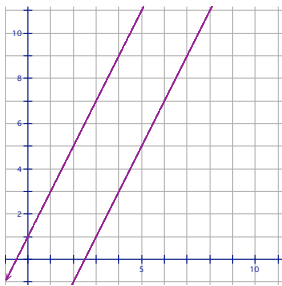
20. no conclusions can be made

23. $f = 70^\circ, g = 70^\circ, h = 70^\circ, i = 110^\circ, j = 40^\circ, k = 70^\circ$

27. $(5/3, 1/3)$

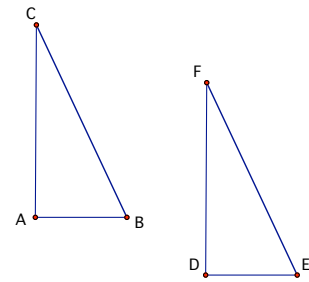
31. $y = 4$

34.



37. $x = 19$

40.



44. \overline{BI} since it is across from $\angle G$ the largest angle of the triangle.

50. $36 - 9\pi$

53. Perimeter = $16 + 2\pi$ cm; Area = $14 + 4\pi$ cm²

54. Let M, N and K be the midpoints of $\overline{TP}, \overline{OP}$ and \overline{TO} respectively. Medians: $\overline{OM} : y = \frac{2}{3}x,$

$\overline{TN} : y = -\frac{4}{3}x + 4, \overline{PK} : y = -\frac{1}{3}x + 2.$ Coordinates of the centroid: $(2, 4/3).$

