## **Immersion Math 30 Supplement**

1. Jennifer drove her car at an average speed of 24 miles per hour for 3 hours. How far did she drive?

2. A cyclist rode across a city in 6.5 hours. If the distance across the city is 35 miles, find the cyclist's speed to the nearest tenth of a mile per hour.

3. John rode his bike at an average speed of 14 miles per hour for 7 hours. How far did he ride?

4. Rosie swam across a lake in 3.5 minutes. If the distance across the lake is 240 meters, find her swimming speed to the nearest tenth of a meter per minute.

5. In which quadrant (I, II, III, or IV) is point (-5,3)?

6. In which quadrant (I, II, III, or IV) is point (4, -2)?

7. In which quadrant (I, II, III, or IV) is point (-1, -6)?

8. In which quadrant (I, II, III, or IV) is point (2,1)?

9. List the degree and coefficient of each term in the polynomial.  $6x^4 - 4x^2 + 8x - 12$ 

10. List the degree and coefficient of each term in the polynomial.  $4x^5 - 3x^3 + 5x - 4$ 

11. List the degree and coefficient of each term in the polynomial.  $3x^7 - 4x^5 + 2x - 1$ 

12. List the degree and coefficient of each term in the polynomial.  $8x^8 - 2x^4 + 7x - 14$ 

13. Find a quadratic with integer coefficients that has the given solution set. (1,5)

14. Find a quadratic with integer coefficients that has the given solution set. (-2,0)

15. Find a quadratic with integer coefficients that has the given solution set. (3, -4)

16. Find a quadratic with integer coefficients that has the given solution set. (-2,7)

17. The sum of a reciprocal of a number and  $\frac{2}{3}$  is  $\frac{13}{15}$ . Find the number.

18. The sum of a reciprocal of a number and  $\frac{5}{8}$  is  $\frac{7}{8}$ . Find the number.

19. The sum of a reciprocal of a number and  $\frac{1}{4}$  is  $\frac{7}{12}$ . Find the number.

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20. The sum of a reciprocal of a number and  $\frac{1}{2}$  is  $\frac{5}{6}$ . Find the number.

21. Find the equation of the circle in the graph below.



23. Find the equation of the circle in the graph below.



22. Find the equation of the circle in the graph below.

24. Find the equation of the circle in the graph below.



