

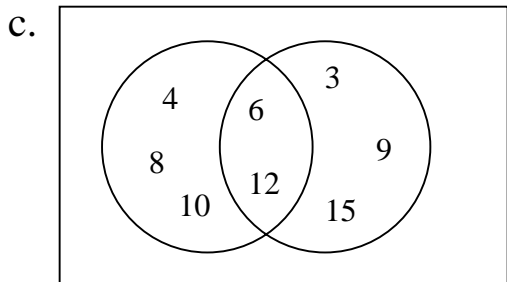
Problem Set 45 — Even Answers

2. $R_T = 70$ kph, $R_B = 40$ kph

4. 3024

6a. $H \cup K = \{3, 4, 6, 8, 9, 10, 12, 15\}$

b. $H \cap K = \{6, 12\}$



8a. integer, rational, real

b. rational, real

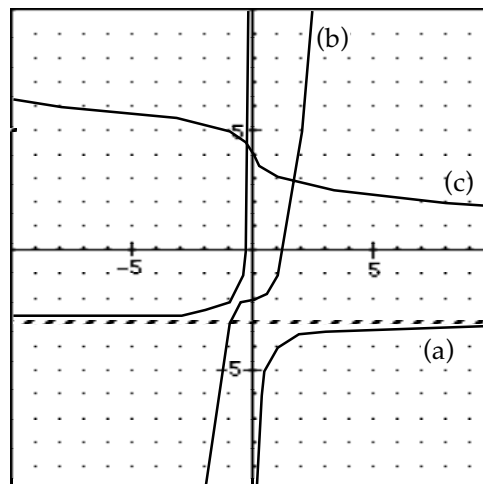
c. irrational, real

10. $\sin A = 0.8$

$\cos A = 0.6$

$\tan A \approx 1.333$

12. $x^4 + 12x^3 + 54x^2 + 108x + 81$



14.

16a. $s(-3) = 11$

b. $s(t + h) = t^2 + 2th + h^2 + 2$

18. $V = 48\sqrt{2} \text{ cm}^3 \approx 67.882 \text{ cm}^3$

$SA = (48 + 16\sqrt{17} + 12\sqrt{2}) \text{ cm}^2$
 $\approx 130.940 \text{ cm}^2$

20. $x = 35$, $y = 30$, $K = 150$

22. $x = 1, 3$

24. $x = -3, 0, \frac{5}{2}$

26a. $\frac{1}{81}$ b. $5^{\frac{1}{3}}$

28. $\frac{x-2}{x-5}$

30. $3y^{-1} - 3x^{-5}y^3$