

Section 1.3 Focus Exercise Answers

1. a) $10 - 3 = 10 + (-3) = 7$ b) $15 - 5 = 15 + (-5) = 10$
c) $8 - 12 = 8 + (-12) = -4$ d) $9 - 9 = 9 + (-9) = 0$
e) $-2 - 4 = -2 + (-4) = -6$ f) $-6 - 9 = -6 + (-9) = -15$
g) $3 - 8 = 3 + (-8) = -5$ h) $-16 - 1 = -16 + (-1) = -17$
2. a) $7 - 4 = -4 + 7 = 3$ b) $2 - 12 = -12 + 2 = -10$
c) $-3 + 6 = 6 - 3 = 3$ d) $-9 - 1 = -1 - 9 = -10$
e) $-10 - 8 = -8 - 10 = -18$ f) $8 - 20 = -20 + 8 = -12$
g) $-15 + 51 = 51 - 15 = 36$ h) $22 - 29 = -29 + 22 = -7$
3. a) $8 - (-10) = +8$ and the opposite of $-10 = 8 + 10 = 18$
b) $-3 - (-4) = -3$ and the opposite of $-4 = -3 + 4 = 1$
c) $7 - (-9) = +7$ and the opposite of $-9 = 7 + 9 = 16$
d) $-9 - (-4) = -9$ and the opposite of $-4 = -9 + 4 = -5$
e) $-12 - (-7) = -12$ and the opposite of $-7 = -12 + 7 = -5$
f) $-6 - (-6) = -6$ and the opposite of $-6 = -6 + 6 = 0$
4. a) $2 - (-7) = 2 + 7 = 9$ b) $12 - (-2) = 12 + 2 = 14$
c) $-3 - (-5) = -3 + 5 = 2$ d) $-6 - (-7) = -6 + 7 = 1$
e) $-4 - (-4) = -4 + 4 = 0$ f) $0 - (-10) = 0 + 10 = 10$
5. a) 0.8 b) -5.5 c) -0.7 d) -1.1 e) -9.3 f) -7.4
g) -1.25 h) -2.52 i) $\frac{5}{9}$ j) $-\frac{10}{11}$ k) $\frac{11}{25}$ l) $-\frac{6}{7}$
m) $\frac{9}{13}$ n) $-\frac{5}{14}$ o) $\frac{13}{11}$ p) $\frac{17}{21}$
6. Numerical expression: $23 - 35 = -12$; Marla's new balance is $-\$12$.
7. Numerical expression: $-64 - 36 = -100$; Tom's new balance is $-\$100$.
8. Numerical expression: $-6 + 13 = 7$; The temperature at noon was 7° .
9. Numerical expression: $-2 - 15 = -17$; The temperature at 10:00 PM was -17° .