

## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve each question. Round your answer to the nearest hundredth.**

- 1) Trevon can pick forty bushels of apples in 15 hours. Ted can pick the same amount in 9 hours. If they worked together how long would it take them?
- 2) It takes Kali 11 hours to mop a warehouse. Adam can mop the same warehouse in 8 hours. Find how long it would take them if they worked together.
- 3) Adam can install a new deck in 15 hours. Beth can install the same deck in 12 hours. If they worked together how long would it take them?
- 4) It takes Darryl nine hours to tar a roof. Beth can tar the same roof in 16 hours. Find how long it would take them if they worked together.
- 5) Working alone, it takes Krystal nine hours to pick forty bushels of apples. Jenny can pick the same amount in eight hours. If they worked together how long would it take them?
- 6) Maria can pick forty bushels of apples in ten hours. Ted can pick the same amount in eight hours. How long would it take them if they worked together?

**Solve each equation.**

$$7) -4(k - 5) = -(7k + 7)$$

$$8) -3(5v - 5) = -3(1 + 2v)$$

$$9) 2(1 - 5n) = -7 - (8 - 7n)$$

$$10) 7(m + 4) - 6(4m + 1) = 6 + m + 1 - 3m$$

$$11) 4n - 4(n + 7) = 2(-5n + 7) + 7n$$

$$12) \frac{102889}{1120} = \frac{31}{8} \left( \frac{19}{4}x + \frac{13}{7} \right)$$

$$13) 8 \left( 7r + \frac{17}{6} \right) = -\frac{352}{3}$$

$$14) \frac{14}{3} \left( \frac{16}{5}x - \frac{1}{3} \right) = -\frac{5446}{45}$$

$$15) -\frac{761}{112} = -\frac{27}{8}\left(x - \frac{27}{7}\right) + \frac{7}{2}\left(2x + \frac{21}{8}\right)$$

$$16) -\frac{4799}{336} = \frac{3}{2}\left(2x - \frac{23}{7}\right) + \frac{11}{8}\left(\frac{5}{2}x + 1\right)$$

$$17) 2.9(2.1 - 4.11x) = 38.1036 + 1.42x$$

$$18) -0.1(1.72k + 5.8) = 7.4k + 34.2512$$

19) Imani traveled to the town hall and back. The trip there took five hours and the trip back took two hours. She averaged 30 km/h faster on the return trip than on the outbound trip. What was Imani's average speed on the outbound trip?

20) Jasmine drove to her cabin on the lake and back. The trip there took six hours and the trip back took five hours. She averaged 8 km/h faster on the return trip than on the outbound trip. What was Jasmine's average speed on the outbound trip?