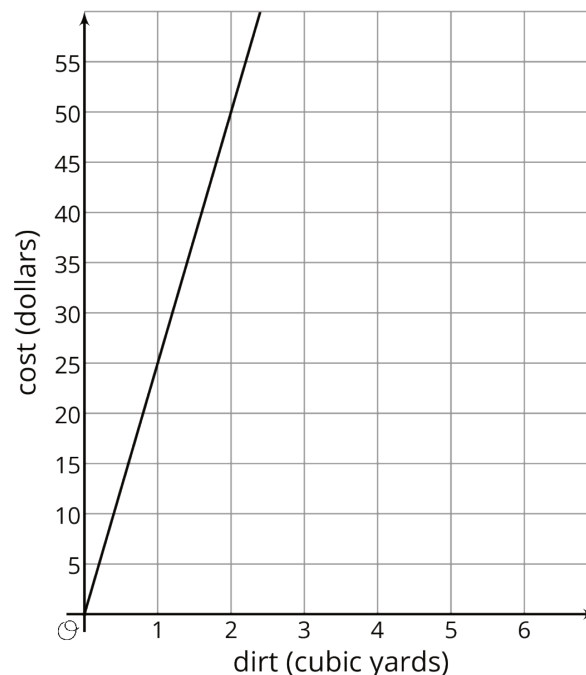# Lesson 3 Practice Problems

1. A contractor must haul a large amount of dirt to a work site. She collected information from two hauling companies.

   EZ Excavation gives its prices in a table.

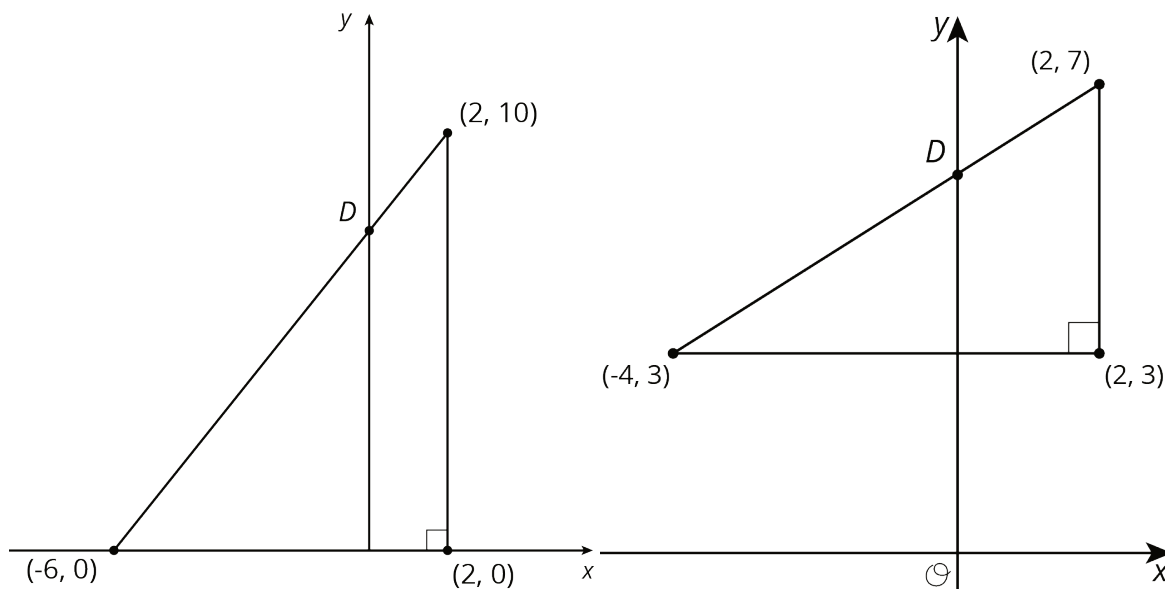 | dirt (cubic yards) | cost (dollars) |
   | --- | --- |
   | 8 | 196 |
   | 20 | 490 |
   | 26 | 637 |

   Happy Hauling Service gives its prices in a graph.

   a. How much would each hauling company charge to haul 40 cubic yards of dirt? Explain or show your reasoning.

   b. Calculate the rate of change for each relationship. What do they mean for each company?

   c. If the contractor has 40 cubic yards of dirt to haul and a budget of $1000, which hauling company should she hire? Explain or show your reasoning.

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1

2. Andre and Priya are tracking the number of steps they walk. Andre records that he can walk 6000 steps in 50 minutes. Priya writes the equation $y = 118x$, where y is the number of steps and x is the number of minutes she walks, to describe her step rate. This week, Andre and Priya each walk for a total of 5 hours. Who walks more steps? How many more?

3. Find the coordinates of point D in each diagram:

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4. Solve each equation.

$$\frac{1}{7}a + \frac{3}{4} = \frac{9}{8}$$

$$\frac{2}{3} + \frac{1}{5}b = \frac{5}{6}$$

$$\frac{3}{2} = \frac{4}{3}c + \frac{2}{3}$$

$$0.3d + 7.9 = 9.1$$

$$11.03 = 8.78 + 0.02e$$

(From Unit 3, Lesson 7.)