### Lesson 1 Practice Problems

1. A certain ceiling is made up of tiles. Every square meter of ceiling requires 10.75 tiles. Fill in the table with the missing values.

|  |  |
| --- | --- |
| * square meters of ceiling | * number of tiles |
| * 1 |  |
| * 10 |  |
|  | * 100 |
|  |  |

1. On a flight from New York to London, an airplane travels at a constant speed. An equation relating the distance traveled in miles, , to the number of hours flying, , is . How long will it take the airplane to travel 800 miles?
2. Each table represents a proportional relationship. For each, find the constant of proportionality, and write an equation that represents the relationship.

|  |  |
| --- | --- |
|  |  |
| * 2 | * 8 |
| * 3 | * 12 |
| * 5 | * 20 |
| * 10 | * 40 |

* Constant of proportionality:
* Equation:

|  |  |
| --- | --- |
|  |  |
| * 2 | * 6.28 |
| * 3 | * 9.42 |
| * 5 | * 15.7 |
| * 10 | * 31.4 |

* Constant of proportionality:
* Equation:

1. Diego bought 12 mini muffins for $4.20.
   1. At this rate, how much would Diego pay for 4 mini muffins?
   2. How many mini muffins could Diego buy with $3.00? Explain or show your reasoning. If you get stuck, consider using the table.

|  |  |
| --- | --- |
| * number of mini muffins | * price in dollars |
| * 12 | * 4.20 |
|  |  |
|  |  |
|  |  |

* (From Unit 2, Lesson 9.)

1. It takes minutes to fill a 3-gallon bucket of water with a hose. At this rate, how long does it take to fill a 50-gallon tub? If you get stuck, consider using a table.

* (From Unit 2, Lesson 10.)



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