### 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
 |
| * $a$
 |  |

1. On a flight from New York to London, an airplane travels at a constant speed. An equation relating the distance traveled in miles, $d$, to the number of hours flying, $t$, is $t=\frac{1}{500}d$. 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.

|  |  |
| --- | --- |
| * $s$
 | * $P$
 |
| * 2
 | * 8
 |
| * 3
 | * 12
 |
| * 5
 | * 20
 |
| * 10
 | * 40
 |

* Constant of proportionality:
* Equation: $P=$

|  |  |
| --- | --- |
| * $d$
 | * $C$
 |
| * 2
 | * 6.28
 |
| * 3
 | * 9.42
 |
| * 5
 | * 15.7
 |
| * 10
 | * 31.4
 |

* Constant of proportionality:
* Equation: $C=$
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 ofmini muffins
 | * price indollars
 |
| * 12
 | * 4.20
 |
|  |  |
|  |  |
|  |  |

* (From Unit 2, Lesson 9.)
1. It takes $1\frac{1}{4}$ 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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