## Complete.

(1) $973 \mathrm{mg}=0.973$ $\qquad$ (2) $0.058 \mathrm{~g}=58$ $\qquad$
(3) $10.64 \mathrm{~kg}=$ $\qquad$
(4) $4.001 \mathrm{~kg}=$ $\qquad$ mg
(5) $29 \mathrm{~g}=0.029$ $\qquad$ (6) $7 \mathrm{mg}=$ $\qquad$
(7) $3.7 \mathrm{~g}=$ $\qquad$ mg
(8) $84 \mathrm{~g}=$ $\qquad$ kg

Solve.
(9) The mass of substances left in a sample after the liquid is evaporated is called the total dissolved solids. Kim split up 2 liters of water into three different samples and boiled all the liquid away in each. The masses of solids left in the three samples were 2.025 grams, 457 mg , and 589 mg . Using the table at the right,

| Total Dissolved Solids in <br> 1 Liter of Solution |  |
| :--- | :--- |
| fresh | $<1,000 \mathrm{mg}$ |
| brackish | 1,000 to $10,000 \mathrm{mg}$ |
| saline | $>10,000 \mathrm{mg}$ | how should Kim classify the water?

10 Jamal watched his older brother Robert lift weights. The bar alone had a mass of 20 kg .
On the bar he had two 11.4 kg weights, two 4.5 kg weights, and four 450 g weights. What mass was Robert lifting?

11 Barry bought 25 kg of fish-flavored cat food and 35 kg of chicken-flavored cat food for the cat rescue center. He is going to divide the cat food into packets of 300 grams. How many packets will he make?
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Greyson rides his bike at a constant rate. In 30 minutes, Greyson can bike 7 miles.
(1) Complete the table to show the distance Greyson can ride in $0,30,60$, and 90 minutes.

| Time (min) | 0 | 30 | 60 | 90 |
| :---: | :---: | :---: | :---: | :---: |
| Distance (mi) |  | 7 |  |  |

(2) Write the ordered $(x, y)$ pairs the data represent. Then graph the points and extend the line.

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(3) How far would you expect Greyson to ride in 105 minutes?

Explain your answer.

Complete the equation.
(4) $435 \mathrm{~L}=\square \mathrm{kL}$
(6) $86,300 \mathrm{~mL}=$ $\qquad$ L
( $5,669 \mathrm{~mL}=$ $\qquad$ L
(5) $6.71 \mathrm{~L}=$ $\qquad$ mL
(7) $109 \mathrm{~L}=$ $\qquad$ kL
(10) $9.12 \mathrm{~kL}=9,120$ $\qquad$ (11) $9,235 \mathrm{~mL}=$ $\qquad$ L
(12) Stretch Your Thinking Write three measurements using grams and three measurements using milligrams that total 15.4 grams.
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