### Lesson 9 Practice Problems

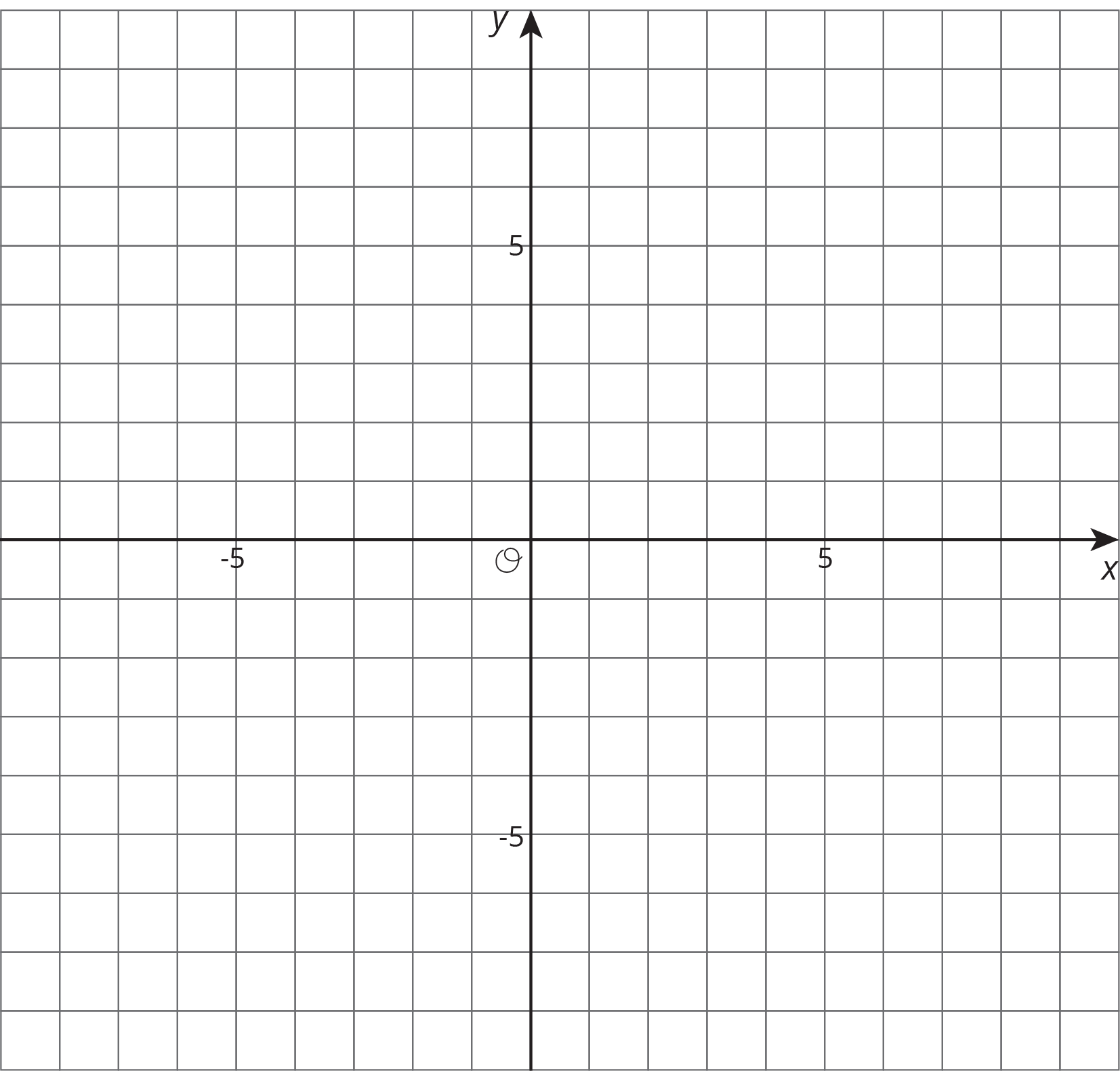
1. Match each number to its name.
   1. 1,000,000
   2. 0.01
   3. 1,000,000,000
   4. 0.000001
   5. 0.001
   6. 10,000
   * One hundredth
   * One thousandth
   * One millionth
   * Ten thousand
   * One million
   * One billion
2. Write each expression as a multiple of a power of 10:
   1. 42,300
   2. 2,000
   3. 9,200,000
   4. Four thousand
   5. 80 million
   6. 32 billion
3. Each statement contains a quantity. Rewrite each quantity using a power of 10.
   1. There are about 37 trillion cells in an average human body.
   2. The Milky Way contains about 300 billion stars.
   3. A sharp knife is 23 millionths of a meter thick at its tip.
   4. The wall of a certain cell in the human body is 4 nanometers thick. (A nanometer is one billionth of a meter.)
4. A fully inflated basketball has a radius of 12 cm. Your basketball is only inflated halfway. How many more cubic centimeters of air does your ball need to fully inflate? Express your answer in terms of . Then estimate how many cubic centimeters this is by using 3.14 to approximate .

* (From Unit 6, Lesson 24.)

1. Solve each of these equations. Explain or show your reasoning.

* (From Unit 4, Lesson 13.)

1. Graph the line going through with a slope of and write its equation.

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* (From Unit 5, Lesson 9.)

1. On a map of Chicago, 1 cm represents 100 m. Select **all** statements that express the same scale.
   1. 5 cm on the map represents 50 m in Chicago.
   2. 1 mm on the map represents 10 m in Chicago.
   3. 1 km in Chicago is represented by 10 cm the map.
   4. 100 cm in Chicago is represented by 1 m on the map.

* (From Unit 2, Lesson 5.)



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