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# 1—The Train Ride

<sup>1</sup>Mrs. Applecumb, Mrs. Winterbloom, Mr. Papas, Ms. Kamen, Ms. Twinkle, and Mr. Lyons were in the same train car. <sup>2</sup>Mrs. Applecumb sat in seat 10. <sup>3</sup>Mrs. Winterbloom sat in seat 5 next to Mr. Papas, who sat in seat 6. <sup>4</sup>Ms. Kamen always sat in the back on the last seat, seat 27, because she liked to stretch her legs and grade her students' papers. <sup>5</sup>Ms. Twinkle sat in seat 20 next to Mr. Lyons, who sat in seat 19.

<sup>6</sup>The train engineer loved to play math games during the ride. <sup>7</sup>He said over the loud speaker, "Does anyone know what a factor is?" <sup>8</sup>Mrs. Winterbloom, who was not really listening, said, "This man is silly. <sup>9</sup>Of course, I know what a tractor is." <sup>10</sup>Mr. Papas laughed and explained to her that the word was "factor" not "tractor." <sup>11</sup>The train

engineer then said, "If any of you are seated in a seat that is a factor of 20, you will get a free engineer's cap. <sup>12</sup>Now remember, my fellow riders, a factor is any number that goes into another number evenly or without a remainder." <sup>13</sup>He explained, "Remember, the factors of 12 are 1, 2, 3, 4, 6 and 12. <sup>14</sup>Don't get this confused with the word m-u-l-t-i-p-l-e (he said this word very slowly). <sup>15</sup>The multiples of 12 are 12, 24, 36, 48, 60, etc., etc." <sup>16</sup>Mr. Lyons became very happy. <sup>17</sup>He began to shout, "I am seated on a seat that is a factor of 20." <sup>18</sup>This made Ms. Kamen very upset. <sup>19</sup>She began to mumble to herself and shake her head.

<sup>20</sup>Then the engineer said, "By the way, any of you who are seated in a seat that is a multiple of 1 will get a free ride next time."

## Questions

1. What are the factors of 20? \_\_\_\_\_

Give the number of the sentence that provides the best evidence for your answer.

\_\_\_\_\_

2. Of the people mentioned in the story, who will get a free engineer's cap on this ride? Use complete sentences to explain your thinking.

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3. Is Mr. Lyons correct in thinking that he will be getting a free engineer's cap on this ride? Why or why not? Use complete sentences to explain your thinking.

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4. Which of the following shows the first four multiples of 3?


- a. 3, 6, 9, and 12
- b. 3, 9, 12, and 18
- c. 1, 3, 6, and 9
- d. none of these

Give the number of the sentence that provides the best evidence for your answer.

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5. Of the people mentioned in the story, who is seated in a seat that is a multiple of 3?

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6.  Why is 1 a factor of every number? Use complete sentences to explain your thinking.

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7. Who will be getting a free ride next time they ride the train?

- a. Ms. Kamen
- b. Mr. Papas and Ms. Twinkle
- c. Mrs. Applecrumb
- d. all of them