### Lesson 12 Practice Problems

1. A backpack normally costs $25 but it is on sale for $21. What percentage is the discount?
* (From Unit 4, Lesson 12.)
1. Find each product.
	1. $\frac{2}{5}⋅\left(-10\right)$
	2. $-8⋅\left(\frac{-3}{2}\right)$
	3. $\frac{10}{6}⋅0.6$
	4. $\left(\frac{-100}{37}\right)⋅\left(-0.37\right)$
* (From Unit 5, Lesson 9.)
1. Select **all** expressions that show $x$ increased by 35%.
	1. $1.35x$
	2. $\frac{35}{100}x$
	3. $x+\frac{35}{100}x$
	4. $\left(1+0.35\right)x$
	5. $\frac{100+35}{100}x$
	6. $\left(100+35\right)x$
2. Complete each sentence with the word *discount*, *deposit*, or *withdrawal*.
	1. Clare took $20 out of her bank account. She made a \_\_\_\_\_.
	2. Kiran used a coupon when he bought a pair of shoes. He got a \_\_\_\_\_.
	3. Priya put $20 into her bank account. She made a \_\_\_\_\_.
	4. Lin paid less than usual for a pack of gum because it was on sale. She got a \_\_\_\_\_.
* (From Unit 4, Lesson 11.)
1. Here are two stories:
	* The initial freshman class at a college is 10% smaller than last year’s class. But then during the first week of classes, 20 more students enroll. There are then 830 students in the freshman class.
	* A store reduces the price of a computer by $20. Then during a 10% off sale, a customer pays $830.
* Here are two equations:
	+ $0.9x+20=830$
	+ $0.9\left(x−20\right)=830$
	1. Decide which equation represents each story.
	2. Explain why one equation has parentheses and the other doesn’t.
	3. Solve each equation, and explain what the solution means in the situation.



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