### Lesson 6 Practice Problems

1. Draw a diagram to represent each of these situations. Then write an addition expression that represents the final temperature.
	1. The temperature was $80^{∘}F$ and then fell $20^{∘}F$.
	2. The temperature was $-13^{∘}F$ and then rose $9^{∘}F$.
	3. The temperature was $-5^{∘}F$ and then fell $8^{∘}F$.
	4. The temperature is -2$​^{∘}C$. If the temperature rises by 15$​^{∘}C$, what is the new temperature?
	5. At midnight the temperature is -6$​^{∘}C$. At midday the temperature is 9$​^{∘}C$. By how much did the temperature rise?
2. Complete each statement with a number that makes the statement true.
	1. \_\_\_\_\_ < $7^{∘}C$
	2. \_\_\_\_\_ < $-3^{∘}C$
	3. $-0.8^{∘}C$ < \_\_\_\_\_ < $-0.1^{∘}C$
	4. \_\_\_\_\_ > $-2^{∘}C$
* (From Unit 7, Lesson 1.)
1. Match the statements written in English with the mathematical statements. All of these statements are true.
	1. The number -15 is further away from 0 than the number -12 on the number line.
	2. The number -12 is a distance of 12 units away from 0 on the number line.
	3. The distance between -12 and 0 on the number line is greater than -15.
	4. The numbers 12 and -12 are the same distance away from 0 on the number line.
	5. The number -15 is less than the number -12.
	6. The number 12 is greater than the number -12.
	7. $\left|-12\right|>-15$
	8. $-15<-12$
	9. $\left|-15\right|>\left|-12\right|$
	10. $\left|-12\right|=12$
	11. $12>-12$
	12. $\left|12\right|=\left|-12\right|$
* (From Unit 7, Lesson 5.)
1. Evaluate each expression.
	* $2^{3}⋅3$
	* $\frac{4^{2}}{2}$
	* $3^{1}$
	* $6^{2}÷4$
	* $2^{3}−2$
	* $10^{2}+5^{2}$
* (From Unit 4, Lesson 13.)
1. Decide whether each table could represent a proportional relationship. If the relationship could be proportional, what would be the constant of proportionality?
	1. The number of wheels on a group of buses.

| * + number of buses
 | * + number of wheels
 | * + wheels per bus
 |
| --- | --- | --- |
| * + 5
 | * + 30
 |  |
| * + 8
 | * + 48
 |  |
| * + 10
 | * + 60
 |  |
| * + 15
 | * + 90
 |  |

* 1. The number of wheels on a train.

| * + number of train cars
 | * + number of wheels
 | * + wheels per train car
 |
| --- | --- | --- |
| * + 20
 | * + 184
 |  |
| * + 30
 | * + 264
 |  |
| * + 40
 | * + 344
 |  |
| * + 50
 | * + 424
 |  |

* (From Unit 5, Lesson 4.)



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