### Lesson 3 Practice Problems

1. What is the final elevation if
   1. A bird starts at 20 m and changes 16 m?
   2. A butterfly starts at 20 m and changes -16 m?
   3. A diver starts at 5 m and changes -16 m?
   4. A whale starts at -9 m and changes 11 m?
   5. A fish starts at -9 meters and changes -11 meters?
2. One of the particles in an atom is called an electron. It has a charge of -1. Another particle in an atom is a proton. It has charge of +1. The charge of an atom is the sum of the charges of the electrons and the protons. A carbon atom has an overall charge of 0, because it has 6 electrons and 6 protons and . Find the overall charge for the rest of the elements on the list.

|  | * charge from electrons | * charge from protons | * overall charge |
| --- | --- | --- | --- |
| * carbon | * -6 | * +6 | * 0 |
| * neon | * -10 | * +10 |  |
| * oxide | * -10 | * +8 |  |
| * copper | * -27 | * +29 |  |
| * tin | * -50 | * +50 |  |

1. Add.
2. Last week, the price, in dollars, of a gallon of gasoline was . This week, the price of gasoline per gallon increased by 5%. Which expressions represent this week's price, in dollars, of a gallon of gasoline? Select **all** that apply.

* (From Unit 4, Lesson 8.)

1. Decide whether each table could represent a proportional relationship. If the relationship could be proportional, what would be the constant of proportionality?
   1. Annie’s Attic is giving away $5 off coupons.

| * + original price | * + sale price |
| --- | --- |
| * + $15 | * + $10 |
| * + $25 | * + $20 |
| * + $35 | * + $30 |

* 1. Bettie's Boutique is having a 20% off sale.

| * + original price | * + sale price |
| --- | --- |
| * + $15 | * + $12 |
| * + $25 | * + $20 |
| * + $35 | * + $28 |

* (From Unit 2, Lesson 7.)



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