Foundations of Algebra
**Day 5: Interpreting Expressions**
**Practice Assignment**

Unit 3: Arithmetic to Algebra

Name: _Key_

Practice

0   25   50   75   100

a. Alex goes to a soccer game and can buy candy for $1.50 and soda for $2.25. This scenario can be modeled by the expression $1.50x + 2.25y$. Identify what the following parts of the expression represent.

| | |
|---|---|
| 1.50 | price of a piece of candy |
| 2.25 | price of a soda |
| x | number of candy purchased |
| y | number of soda purchased |
| 1.50x | total amount spent on candy |
| 2.25y | total amount spent on soda |
| 1.50x + 2.25y | total amount spent for snacks |

b. Haylie loves to watch movies. She joined a movie club where she pays $5 to join the club and each movie she watches is $2. The expression that models her scenario is $5 + 2d$. Identify what the following parts of the expression represent.

| | |
|---|---|
| 2 | price per movie |
| d | number of movies watched |
| 2d | total spent on watching movies |
| 5 | fee to join club |
| 5 + 2d | total spent on movie club |

c. Oleg is on a strict budget for grocery shopping. He has set aside $600 and has budgeted that he can spend $75 per week on groceries. The expression that models his scenario is $600 - 75w$. Identify what the follow parts of the expression represent.

| | |
|---|---|
| 600 | amount he can spend on groceries |
| -75 | amount he spends each week |
| w | number of weeks |
| -75w | total spent each week |
| 600 - 75w | amount of money to spend on groceries remaining |

d. Kylie is going shopping and finds that sweaters cost her $25 and jeans cost her $30. She has a coupon for 20% off her total purchase. The expression that models her scenario is .80(25s + 30j). Identify what the following parts of the expression represent.

| | |
|---|---|
| 25 | Cost of a sweater |
| s | number of sweaters purchased |
| 25s | total spent on sweaters |
| 30 | cost of jeans |
| j | number of jeans purchased |
| 30j | total spent on jeans |
| .80 | percent she pays (got 20% off) |
| .80(25s + 30j) | total price paid for sweaters and jeans |