

x-expression

The student will represent verbal quantitative situations algebraically and evaluate these expressions for given replacement values of the variables.

SOL: A.1

MATERIALS: x-expression cards

Groups: 3, 4, or 5 players

Game:

Shuffle playing cards and x-expression cards separately. Place x-expression cards face down in a pack. Deal playing cards, an equal number to all players. Players sort cards into like suits. Dealer turns up x-expression card. Player to left of dealer plays a card of any suit and calls out the value of the expression as he plays. All other players must then play a card of that suit by calling out its value. Player with the greatest value for his expression wins the trick. IF a player cannot follow suit, he must play another suit but cannot win the trick. If a tie occurs, the first player to play the winning card wins. One point is awarded per trick. Players may challenge each other. If correct, challenger wins the trick. If incorrect, he loses ALL the tricks he has won thus far.

10	-0.6	1
x-expression	x-expression	x-expression
0.3	4	-5
x-expression	x-expression	x-expression

5	0	3
x-expression	x-expression	x-expression
$-\frac{1}{4}$	-2	$\frac{1}{2}$
x-expression	x-expression	x-expression

$5x$ <input type="radio"/>	$x/4$ <input type="radio"/>	$2 + x^2$ <input type="radio"/>
$2x^2 + 2$ <input type="radio"/>	$-2x + 2$ <input type="radio"/>	$x^2 + 2x$ <input type="radio"/>

$x^3 + 1$ <input type="checkbox"/>	$\frac{3}{2x}$ <input type="checkbox"/>	$3x$ <input type="checkbox"/>
$x + 7$ <input type="checkbox"/>	$4(3x)$ <input type="checkbox"/>	$-2x$ <input type="checkbox"/>

$1/-x$ ■	$3 - 2x$ ■	$0x$ ■
$4(-2x)$ ■	x ■	$2x + 3$ ■

$2x^2 + x$ <p>●</p>	$2x/5$ <p>●</p>	$(x + 2)^2$ <p>●</p>
$x - 5$ <p>●</p>	$-2(x + 3)$ <p>●</p>	$x^2 - 1$ <p>◆</p>

$$6x - 2$$



$$2x^2 - 3x$$



$$3x^2 + 1$$



$$(-x)^2 + 2$$



$$6/x$$



$$x/2$$



$3(2x)$ ♦	$6 - 2x$ ♦	$-x^2 + 1$ ♦
$(x - 3)^2$ ♦	$-x + 3$ ♦	$-x$ ♦

$5 - x$



$3(2 - x)$



$4 - 2x$



$x^2 - 1$

