N7 Tasks

Part A

1. Choose the correct expression to match this diagram:



* 1. (-4) x (-3)
	2. (-4) x (+3)
	3. (+4) x (+3)
	4. (+4) x (-3)
1. Model the product of the given expressions:

	1. (+3) x (-5)
	2. (-2) x (+4)
2. Write a number sentence for the problem below and use a diagram to model the situation.

Albert lost 4 points in each round (hand) of cards that was played. If he played 5 rounds, what was his score at the end of the game?
3. Which expression has a value of (-12)?

 (-7) × (-2) – (+4)

 (+3) × [(+12) ÷ (+3)]

 (+2) + [(-2) × (+2)] + (-10)

 (-6) + (-14) ÷ (+2)

 (36 ÷ (-10+ 4))/([ (-3)×8)] ÷ (-12)) =

1. To win a new iPod touch, you must answer the following skill testing correctly.

 (3) × (-8) + (-18) ÷ (-2) – (-4)

1. Jennifer withdraws $27.00 each week from the bank for 15 weeks. After the 15 weeks, what was her total withdrawal? Write the equation and solve.
2. Create a list of 5 different integers.

	1. Using all 5 of them, create an equation where the sum is between 0 and 10.
	2. Using 3 or more integers, create an equation with a product less than -20.
	3. Using 3 or more integers, create an equation with a product more than 20.

1. Jordan and Natalie ran 5 laps of a race. When Natalie finished, Jordan was 15 meters behind her. Suppose Jordan fell behind the same number of meters during each lap.

Write a division statement using integers, and solve it to determine how far Jordan fell behind in each lap.
2. Susan borrowed $7 every day. She now owes $56. How many days did she borrow the money? Choose the number sentence that correctly represents this situation. Justify your choice.

	1. (-56) ÷ (-7) =
	2. (-56) ÷ (+7) =
	3. (-7) ÷ (-56) =
	4. (+56) ÷ (-7) =

Part B

1. Jake borrowed money from his father. He paid it back in 14 equal weekly payments. Over the 14 weeks the balance in his savings account decreased by $210. Write and solve the equation that represents this decrease.

Daily High Temperatures for

The Week of April 10 – 16

Sunday +12

Monday +5

Tuesday -10

Wednesday -6

Thursday +7

Friday -13

Saturday -9

1. The chart shows daily high temperatures for a week. Find the average temperature for the week.
2. Create a word problem that requires dividing two integers. Estimate the quotient and explain how you found your estimate. Then solve your problem.
3. Solve and show all your work.

	1. (+10) ÷ (+2) + (+4) $×$ (-3) =
	2. (-10) - (-27) ÷ (-3) =
4. Which expression has a value of (-12)?

	1. (-7) $×$ (-2) – (+4)
	2. (+3) $×$ [(+12) ÷ (+3)]
	3. (+2) + [(-2) $×$ (+2)] + (-10)
	4. (-6) + (-14) ÷ (+2)
5. $ \frac{36 ÷ (-10+ 4)}{\left[ \left(-3\right)×8\right)] ÷ (-12)}$ =
6. To win a new iPod touch, you must answer the following skill testing correctly.

 (3) $×$ (-8) + (-18) ÷ (-2) – (-4)

The contest organizers say that the answer is (-7). Write a quick note to the organizers explaining why there is a problem with their solution and what the correct solution is.

1. Use three -5s and any operations or brackets. Write an expression with a value of:

	1. -5
	2. 2
2. Identify the missing operation signs ($+ , - . × , ÷)$ to make each equation true.

	1. 36 ■ (4 ■ 1) ■ 2 = 24
	2. -12 ■ 4 ■ (-3) = -24
3. Gilbert worked out the following problem and got (+12) for an answer. Is he correct? Show how you know.

 (-72) ÷ (+9) + (+4) $×$ (-3)

Part 3

1. Using brackets, group the terms in the expression below to get the least possible result.

 40 x 6 - 3 $×$ 4 – 5

1. Write three different multiplication equations that all have a negative product.

1. Suppose you multiply two integers. When is the product:

	1. Less than both integers
	2. Greater than both integers
	3. Between the two integers
2. Compare using <, >, =

	1. 3 ÷ 1 \_\_\_\_\_ (-3) ÷ 1
	2. 2 groups of (-5) \_\_\_\_\_ 2 groups of (-10)
3. Name as many pairs of integers as possible that have a product of (-12) and then a product of (+12). Tell what you notice about the number of possible pairs for the positive product versus the negative products.
4. How can you use the rules for multiplying two integers to multiply more than two integers?
5. What is the sign of the quotient of (+8) ÷ (-2)? Explain how you know.

1. Replace each \_\_\_\_\_ with an integer to make the equation true.

	1. (16) ÷ \_\_\_\_\_ = (-4)
	2. (-42) ÷ (-6) = \_\_\_\_\_
	3. (+20) ÷ \_\_\_\_\_ = (+10)
	4. \_\_\_\_\_ ÷ (-3) = (+11)
2. Without doing any calculations, Katie said that the quotients (-384) ÷ (-24) and (384) ÷ (24) must be the same. How did she know?

1. List two ways that the integer (-4) can be expressed as the quotient of three integers.