

Mid-Unit Review

LESSON

- 1.1** 1. Which numbers are divisible by 4?
By 8? How do you know?
a) 932 b) 1418 c) 5056
d) 12 160 e) 14 436

- 1.2** 2. Draw a Venn diagram with 2 loops.
Label the loops: "Divisible by 3" and
"Divisible by 5." Sort these numbers:
54 85 123 735 1740 3756 6195
What is true about the numbers in
the overlapping region?

3. Use the divisibility rules.
Find the factors of each number.
a) 85 b) 136 c) 270

- 1.3** 4. Write an algebraic expression for
each statement.
Let n represent the number.
a) seven more than a number
b) a number multiplied by eleven
c) a number divided by six
d) three less than four times
a number
e) the sum of two and five times
a number

- 1.4** 5. Predict which expression in each
pair will have the greater value
when y is replaced with 8.
Evaluate to check your predictions.
a) i) $y + 7$ ii) $2y$
b) i) $6y$ ii) $9 - y$
c) i) $\frac{y+4}{2}$ ii) $\frac{y}{2} + 4$
d) i) $2y + 6$ ii) $3y - 6$

6. i) For each number pattern,
how is each term related to the
term number?
ii) Let n represent the term number.
Write a relation for the term.

a)

Term Number	1	2	3	4	5	6
Term	6	12	18	24	30	36

b)

Term Number	1	2	3	4	5	6
Term	5	6	7	8	9	10

7. Dave pays to practise in a music
studio. He pays \$12 each month,
plus \$2 for each hour he practises.
a) Write a relation for the total cost
for one month, in dollars, when
Dave practises t hours.
b) How much will Dave pay to
practise 10 h in one month? 20 h?
c) How does the relation change
when the cost per hour doubles?

- 1.5** 8. Use algebra. Write a relation for
each Input/Output table.

a)

Input	Output
x	
1	7
2	11
3	15
4	19

b)

Input	Output
x	
1	5
2	13
3	21
4	29