



Grade 7 SNAP Number Sense

Draw To Represent The Value Of The Number

Number Sense Rubric: Proficient

- Pictures are clearly communicated and represent the value of the number
- Accurate

Draw to represent the value of the number (-29):	Draw to represent the value of the number (-34):	Draw to represent the value of the number (-34):	Draw to represent the value of the number (-29):
Write to describe your picture	Write to describe your picture	Write to describe your picture	Write to describe your picture
<p>Write to describe your picture: I drew a kid being rescued from a hole that is 29m below ground level.</p>	<p>Write to describe your picture: I used red cards because red cards are negative.</p>	<p>Write to describe your picture: = -10 ■ = -1</p>	<p>Write to describe your picture: I drew a thermometer that is showing -29.</p>

Note:

- There is lots of room for creativity in this section. Number lines, real-life examples, measurement tools, base-ten representations (and probably others) are all acceptable.

Goal:

- Demonstrate an understanding of numbers that are less than zero and give a reasonable explanation of the drawing.



Grade 7 SNAP Number Sense

Write The Number In Expanded Form

Number Sense Rubric: Proficient

- Accurately demonstrates the value of each digit

Write the number in expanded form

(-34):

Write the number in expanded form:

$$-30 + -4$$

Write the number in expanded form

(-34):

Write the number in expanded form:

$$(-30) + (-4)$$

Note:

- Students may choose to use parentheses or not.
- Students must show each place value separately (they can't be combined).

Goal:

- Students are able to accurately express a number as the sum of the place values of its digits.



Grade 7 SNAP Number Sense

Create 3 Equations That Equal The Number

Number Sense Rubric: Proficient

- Accurately uses grade appropriate operations in all three equations

Create 3 equations that equal the number (-34):

Create 3 equations that equal the number:

$$\begin{aligned} -50 + 16 &= -34 \\ 2 \times (-17) &= -34 \\ 1 - 35 &= -34 \end{aligned}$$

Create 3 equations that equal the number (-29):

Create 3 equations that equal the number:

$$\begin{aligned} 3 \times (-9) + (-2) &= -29 \\ 50 - 79 &= -29 \\ 87 \div (-3) &= -29 \end{aligned}$$

Create 3 equations that equal the number (-29):

Create 3 equations that equal the number:

$$\begin{aligned} -14 + -15 &= -29 \\ -10 \times 3 + 1 &= -29 \\ -1000 + 971 &= -29 \end{aligned}$$

Notes:

- In Grade 7, students should be able to add, subtract, multiply, and divide, so “grade appropriate” responses should include a variety of these operations (but not necessarily all of them).
- Adding numbers into empty place values (e.g.) is not grade appropriate, nor is adding 1 or 0 to a number (e.g. $-34+0=-34$ or $1 \times (-34)=-34$).
- The line between “grade appropriate” and “not” can be subjective. Use your understanding of the curriculum and your professional judgement to make that call.

Goal:

- Encourage students to find equations that challenge them, but are accurate.



Grade 7 SNAP Number Sense

Write a Real-Life Example

Number Sense Rubric: Proficient

- Connection to a real-life example is provided
- Demonstrates understanding of the number value

Write a real-life example that shows the value of the number:

Write a real life example that shows the value of the number:

I had \$50 in my bank account and I bought headphones for \$79. Now I have -\$29. ☹️

Write a real-life example that shows the value of the number:

Write a real life example that shows the value of the number:

The temperature in Whitehorse in January is -34°C

Write a real-life example that shows the value of the number:

Write a real life example that shows the value of the number:

I ran 1km in 4:30 and my friend ran it in 4:59. My time was -29 seconds compared to hers.

Note:

- Examples with money, time, temperature, and distance are all great ways for students to demonstrate their understanding of decimal.
- Take real-life examples from other sections into account when scoring if this section is lacking (e.g. students might have a great real-life example in the “draw the number” box).

Goal:

- Show the target negative number in a specific, real-life context.



Grade 7 SNAP Number Sense

Counting Forward and Backwards

Number Sense Rubric: Proficient

- Complete and accurate

Count forward by (5) from the number.

6
1
-4
-9
-14
-19
-24
-29
-34

Count forwards by 5 from the number.

Count forward by (12) from the number

67
55
43
31
19
7
-5
-17
-29

Count forwards by 12 from the number.

Count backward by (5) from the number.

Count backwards by <u>5</u> from the number.
-29
-34
-39
-44
-49
-54
-59
-64
-69

Notes:

- The difference between developing and proficient is often seen in a student's ability to add through zero, so watch that part closely.
- One minor error doesn't always mean a student is developing for the "Reasoning and Analyzing" strand. Look at the section as a whole to determine a student's understanding.

Goal:

- Students should be able to count forward and backward by tenths and hundredths from a variety of starting points.



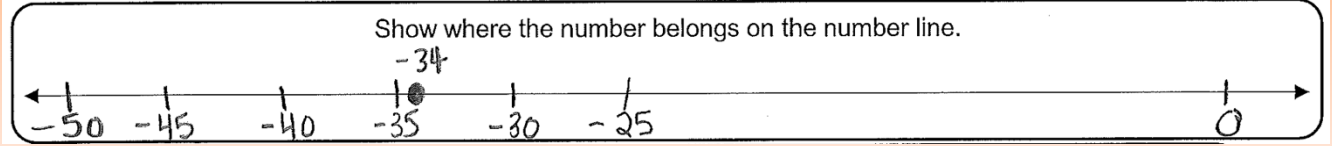
Grade 7 SNAP Number Sense

Number Line

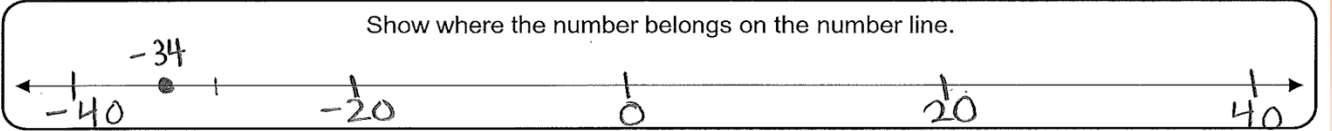
Number Sense Rubric: Proficient

- Correct estimate of placement of number on provided number line with at least three benchmarks and appropriate endpoints.

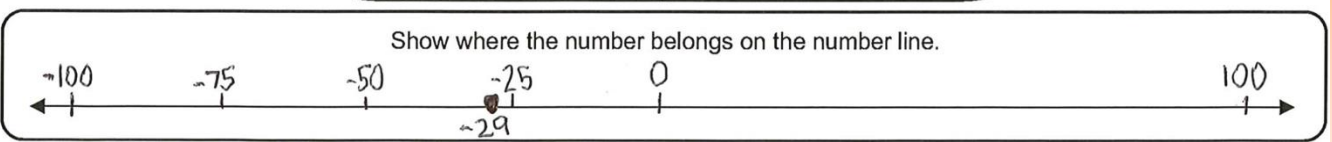
Show where the number (-34) belongs on the number line.



Show where the number (-34) belongs on the number line.



Show where the number (-29) belongs on the number line.



Note:

- In Grade 6 and 7, students must provide their own endpoints in addition to the three (minimum) benchmarks; teachers are encouraged to remind students of this expectation.
- Number lines are vital to students' understanding of integers, so it is very important to incorporate them into your unit and lesson planning.

Goal:

- Using a ruler or other measurement tool can help students to be accurate with the even spacing of their benchmarks and the placement of their number.



Grade 7 SNAP Number Sense

Reflection

Number Sense Rubric: Proficient

- With sentence frames and structure, student can proficiently reflect on their learning

Reflect

Strength
I felt confident about drawing the number.

Stretch
Reflect:
The counting forward was hard when I got to zero.

Goal
I need to practice adding and subtracting integers.

Reflect

Reflect:
In the 3 equations box, I almost wrote $-10 \times 3 - 1 = -29$, then I realized that would equal -31 . I fixed it when I caught that mistake.

Notes:

- It's important to model and teach effective reflection skills, or students will often default to "It was all easy" or "It was all hard."
- Clear expectations like, "Give me one strength, one stretch, and one goal" will lead to more insightful, reflective responses.
- You can find reflection sentence stems in [Connecting and Reflecting Resources](#).

Goal:

- Identify and articulate strengths, stretches, and/or goals related to the content and competencies explored in the SNAP. OR
- Write about strategy selection or how you worked through a challenge.

SNAP

Number Sense

Name: _____

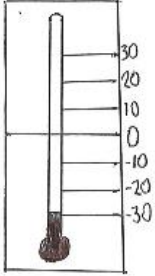
Date: _____

- 67
- 55
- 43
- 31
- 19
- 7
- 5
- 17
- 29

Count forwards by 12 from the number.



Draw to represent the value of the number:



Write to describe your picture:

I drew a thermometer that is showing -29.

-29

Write the number in expanded form:

$(-20) + (-9) = -29$

Write a real life example that shows the value of the number:

I ran 1km in 4:30 and my friend ran it in 4:59. My time was -29 seconds compared to hers.

Create 3 equations that equal the number:

$3 \times (-9) + (-2) = -29$

$50 - 79 = -29$

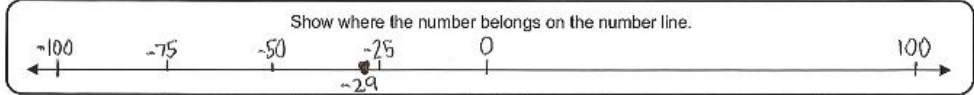
$87 \div (-3) = -29$

Write a real life example that shows the value of the number:

I ran 1km in 4:30 and my friend ran it in 4:59. My time was -29 seconds compared to hers.



- Count backwards by 5 from the number.
- 29
 - 34
 - 39
 - 44
 - 49
 - 54
 - 59
 - 64
 - 69



<p>Strength</p> <p>I felt confident about drawing the number.</p>	<p>Stretch Reflect:</p> <p>The counting forward was hard when I got to zero.</p>	<p>Goal</p> <p>I need to practice adding and subtracting integers.</p>
--	---	---

<p>Communicating & Representing</p> <p>Drawing, Description, Expanded Form</p> <p>Emerging Developing</p> <p>Proficient Extending</p>	<p>Understanding & Solving</p> <p>3 Equations</p> <p>Emerging Developing</p> <p>Proficient Extending</p>	<p>Connecting & Reflecting</p> <p>Real Life & Reflection</p> <p>Emerging Developing</p> <p>Proficient Extending</p>	<p>Reasoning & Analyzing</p> <p>Skip Counting & Number Line</p> <p>Emerging Developing</p> <p>Proficient Extending</p>
---	--	---	--

Number Sense (Integers)

Name: teacher
Date: created

6
1
-4
-9
-14
-19
-24
-29
-34
Count forwards by <u>5</u> from the number.

↑

Draw to represent the value of the number.

Write to describe your picture:

I used red cards because red cards are negative.

Write the number in expanded form:

$(-30) + (-4)$

-34

Write a real life example that shows the value of the number:

The temperature in Whitehorse in January is -34°C

Create 3 equations that equal the number:

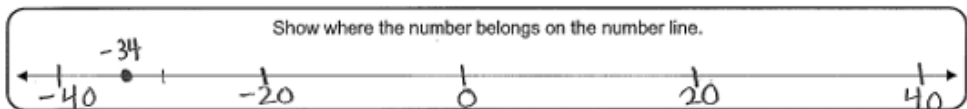
$-68 \div 2 = -34$
 $3 \times -10 - 4 = -34$
 $-20 + -14 = -34$

Write a real life example that shows the value of the number:

The temperature in Whitehorse in January is -34°C

↓

Count backwards by <u>3</u> from the number.
-34
-37
-40
-43
-46
-49
-52
-55
-58



Communicating & Representing 1 2 3 Drawing, description, expanded form	Understanding & Solving 1 2 3 3 equations	Connecting & Reflecting 1 2 3 Real-life	Reasoning & Analyzing 1 2 3 Skip counting & number line
--	---	---	---

SNAP

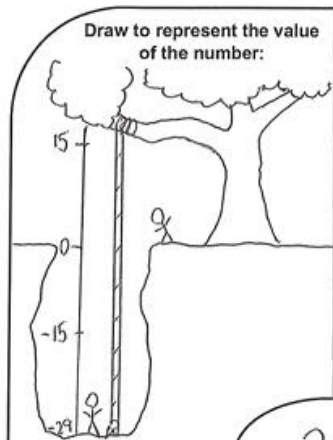
Number Sense

Name: _____

Date: _____

11
6
1
-4
-9
-14
-19
-24
-29

Count forwards by 5 from the number.



Write to describe your picture:
I drew a kid being rescued from a hole that is 29m below ground level.

Write the number in expanded form:
 $-20 + -9 = -29$

-29

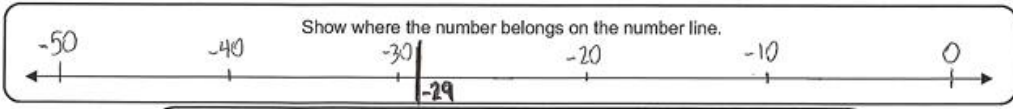
Create 3 equations that equal the number:
 $-14 + -15 = -29$
 $-10 \times 3 + 1 = -29$
 $-1000 + 971 = -29$

Write a real life example that shows the value of the number:
I had \$50 in my bank account and I bought headphones for \$79. Now I have -\$29. 😞

↓

Count backwards by 6 from the number.

-29
-35
-41
-47
-53
-59
-65
-71
-77



Reflect:
In the 3 equations box, I almost wrote $-10 \times 3 - 1 = -29$, then I realized that would equal -31. I fixed it when I caught that mistake!

Communicating & Representing Drawing, Description, Expanded Form Emerging Developing Proficient Extending	Understanding & Solving 3 Equations Emerging Developing Proficient Extending	Connecting & Reflecting Real Life & Reflection Emerging Developing Proficient Extending	Reasoning & Analyzing Skip Counting & Number Line Emerging Developing Proficient Extending
--	---	--	---