Curriculum Outcome

N1: Demonstrate an understanding of rational numbers by: comparing and ordering rational numbers; solving problems that involve arithmetic operations on rational numbers.

Student Friendly:
“BEDMAS with fractions and decimals"

Do we need a warm-up?

$10 \times 3 - 6.5 \div 10 - 1.3$

$8.8 - 3.4 + (5.96 - 5)^2$

$1\frac{5}{6} - \left(\frac{2}{3} \div \frac{5}{3}\right)^2$

$\left(2\frac{2}{5} + 3\frac{1}{2} \times 3\frac{2}{3}\right) \div 2\frac{1}{2}$

Do we need a warm-up?

$10 \times 3 - 6.5 \div 10 - 1.3$

28.05

$8.8 - 3.4 + (5.96 - 5)^2$

6.3216

$1\frac{5}{6} - \left(\frac{2}{3} \div \frac{5}{3}\right)^2$

$\frac{251}{150}$ or $1\frac{101}{150}$

$\left(2\frac{2}{5} + 3\frac{1}{2} \times 3\frac{2}{3}\right) \div 2\frac{1}{2}$

$6\frac{7}{75}$ or $\frac{457}{75}$

~~BE~~DMAS

$$10 \times 3 - 6.5 \div 10 - 1.3$$

$30 - 6.5 \div 10 - 1.3$

$30 - 0.65 - 1.3$

$= 28.05$

~~BE~~ ~~D~~MAS

$$8.8 - 3.4 + (5.96 - 5)^2$$

$8.8 - 3.4 + (0.96)^2$

$8.8 - 3.4 + (0.9216)$

$= 6.3216$

BEDMAS

$$1\frac{5}{6} - \left(\frac{2}{3} \div \frac{5}{3}\right)^2$$

$$\frac{11}{6} - \left[\frac{2}{\cancel{3}_1} \times \frac{\cancel{3}^1}{5}\right]^2$$

$$\frac{11}{6} - \left[\frac{2}{1} \times \frac{1}{5}\right]^2$$

$$\frac{11}{6} - \left[\frac{2}{5}\right]^2$$

$$\frac{11}{6} - \frac{4}{25}$$

x25 x6

$$\frac{275}{150} - \frac{24}{150}$$

$$= \frac{251}{150}$$

$$1\ \frac{101}{150}$$

$$\left(2\frac{2}{5}+3\frac{1}{2}\times 3\frac{2}{3}\right)\div 2\frac{1}{2}$$

$$\left(\frac{12}{5}+\frac{7}{2}\times\frac{11}{3}\right)\div\frac{5}{2}$$

$$\left(\frac{12}{5}+\frac{77}{6}\right)\div\frac{5}{2}$$

$$\left[\frac{72}{30}+\frac{385}{30}\right]\div\frac{5}{2}$$

$$\left[\frac{457}{15\cancel{30}}\right]\times\frac{1\cancel{2}}{5}$$

$$\frac{457}{75}$$

$$=6\frac{7}{75}$$

$$\frac{(3.2 + 4.5)^2 - (-2.8 - 5.3)}{[(1.5) \times 3.2] + [4.5 \cdot (-2.3)]}$$

4.

$$\frac{\left(-\frac{1}{2}\right)^2-\left(-\frac{2}{3}\right)}{\left[\frac{1}{3}+\left(-\frac{3}{12}\right)\right]}$$

Class / Homework

Page 144 & 145

2
3(c,d)
4
5 (a,c)
6(a)
7(a,b,c)
8(a,d)
10(b,c)
14 (b, d)
16ac
19bc
21a
23a,c,d

Pg141

13 cd

Class / Homework

Page 145

16ac
18a
19c
21a
22
23a,c,d

Page- 146 (Practice Test)

All Questions

Homework Solutions

Pg 144

2) $3.12, \frac{-4}{3}, 0.9, \frac{-1}{2}, -0.4$

$\frac{-4}{3} = -1.333$ $\quad \frac{-1}{2} = -0.5$

least to greatest

$\frac{-4}{3}, \frac{-1}{2}, -0.4, 0.9, 3.12$

3a) -3.5 and -3.1

$-3.4, -3.3, -3.2$

3d) $\frac{-5}{2}, \frac{-3}{2}$

$\frac{-4}{2} = -2$

$\frac{-10}{4}, \frac{-4}{4}, \frac{-8}{4}, \frac{-7}{4}, \frac{-6}{4}$

5a) $-1.2 + (-0.3)$

-1.5

5d) $48.05 + 0.003$

$= 48.053$

6) If it dropped to -15.7 it was $7.8°C$ warmer

$-15.7°C + 7.8°C$

$-7.9°C$

OR

so the day before

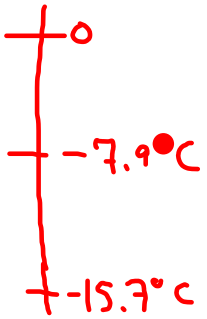
Solve for $\square$

$\square - 7.8 = -15.7$

$\square - 7.8 = -15.7$ $\quad +7.8 \quad +7.8$

$\square = -7.9$

6b)



7a) $\frac{3}{4} + \frac{7}{8}$

$= \frac{3 \cdot 2}{4 \cdot 2} + \frac{7}{8}$ find common Denominators

$= \frac{6}{8} + \frac{7}{8}$

$= \frac{13}{8}$

7c) $-4\frac{5}{6} + \left(-1\frac{5}{12}\right)$

Turn into improper

$= \frac{-29}{6} + \left(\frac{-17}{12}\right)$

find Common Denomin

$= \frac{-58}{12} + \left(\frac{-17}{12}\right)$

$= \frac{-75}{12}$

Reduce

$= \frac{-25}{4}$

8a) $-3.4 - (-4.8)$

$-3.4 + 4.8$

1.4

8d) $63.2 - 80.82$

-16.82

9) $\square - 0.75 = \$21.60$

Solve for $\square$

$\square - 0.75 + 0.75 = 21.60 + 0.75$

$\square = \$22.35$

10a) $\frac{4}{3} - \frac{11}{6}$

find CD

$= \frac{4 \cdot 2}{3 \cdot 2} - \frac{11}{6}$

$= \frac{8}{6} - \frac{11}{6}$

$= \frac{-3}{6}$

Reduce

$= \frac{-1}{2}$

10c) $3\frac{5}{7} - \left(-6\frac{9}{10}\right)$

Make improper

$= \frac{26 \cdot 10}{7 \cdot 10} - \left(\frac{-69}{10}\right)\cdot 7$

find CD

$= \frac{260}{70} - \left(\frac{-483}{70}\right)$

$= \frac{743}{70}$

$= 10\frac{43}{70}$

11a) $(-1.4)\times(-0.8)$
1.12
No

b) $25.6\times(-0.05)$
-1.275
NO

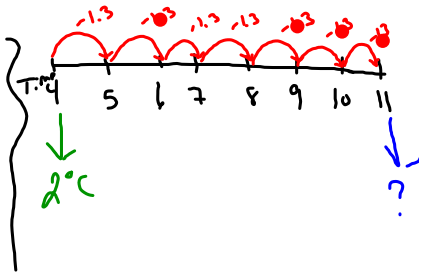
11c) $\left(\frac{-3}{5}\right)\left(\frac{4}{3}\right)$
$= \frac{-12}{15}$ or $\frac{-4}{5}$
$= -0.8$
Yes

d) $\left(\frac{-5}{6}\right)\left(\frac{-2}{3}\right)$
$= \frac{10}{18} = \frac{5}{9}$
$= 0.\overline{55}$
Yes

12) Drop in temperature means colder
From 4:00pm to 11:00pm = 7hour

1.3°C for each hour

$2°C - 1.3(7)$
$= 2°C - 9.1$
$= -7.1°C$



14) a) $3.5\times(-0.3)$
-10.5

b) $(-4.1)(2.7)$
$= -9.43$

c) $\left(\frac{-4}{7}\right)\left(\frac{-2}{3}\right)$
$= \frac{8}{21}$

d) $1\frac{3}{5}\times\left(-2\frac{1}{2}\right)$
$= \frac{8}{5}\times\left(\frac{-5}{2}\right)$ OR $\frac{-40}{10} = -4$
$= \frac{8^{4}}{5_{1}}\times\frac{-5_{1}}{2_{1}}$
$= \frac{4(-1)}{1\times 1}$
$= -4$

15) Decends means $-5.9\,m/h$
After 3.75h

$-5.9\frac{m}{h}\times(3.75h) = -22.125\,m$