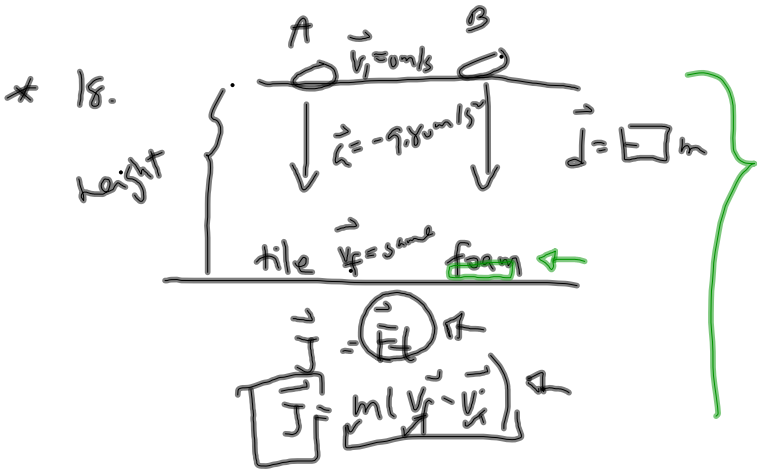
MC - Momentum + Impulse

1. D	6. B	11. C	16. C
2. C	7. C	12. D	17. C
3. B	8. A	13. D	18. C
4. A	9. D	14. C	19. D
5. B	10. C	15. B	20. C

* 18.



#19. $m = 0.60$ kg, $\vec{v}_i = 0$ m/s, $t = 0.20$ s, $\vec{v}_f = 25$ m/s, $\vec{F} = ?$

$$\vec{F}t = m(\vec{v}_f - \vec{v}_i)$$

$$\vec{F} = \frac{m\vec{v}_f}{t}$$

#20. $\vec{J} \Rightarrow$ 0 ⇐ α

$$\Delta\vec{p} = m\vec{v}_f - m\vec{v}_i$$

$\vec{v}_i = 0$ m/s, $\vec{v}_f = +20$ m/s

$\vec{p} = m\vec{v}$

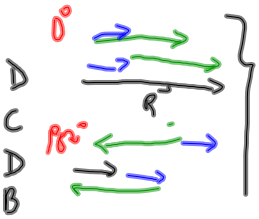
$\Delta\vec{p} = \vec{p}_f - \vec{p}_i = m\vec{v}_f - m\vec{v}_i$

$\vec{p}_i = m\vec{v}_i$, $\vec{p}_f = m\vec{v}_f$

Practice Test #1.

Part 1- MC

1. B
2. B
3. A
4. C
5. A
6. D
7. C
8. D
9. B
10. A

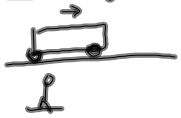


Part 2- Open Response

1. b) Kinematics
   c) Uniform motion

types of motion
Uniform, uniformly acc'd.

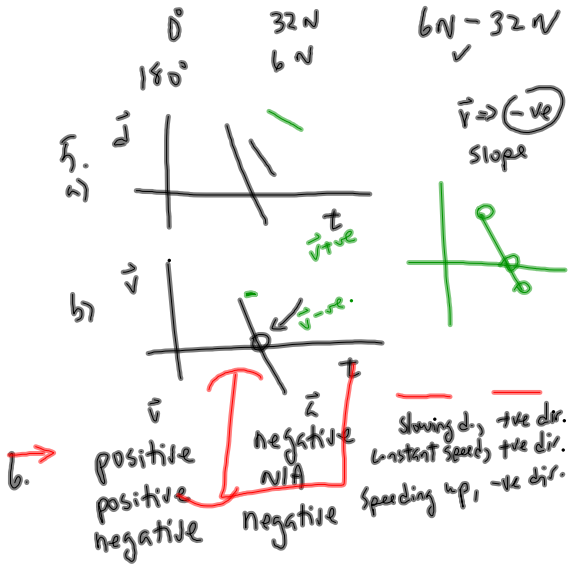
2. a) 

   b) 

3. a) type of quantity → scalar / vector

   b) $\vec{v}, \vec{a}, \vec{F}, \vec{p}, \vec{J}$

4. 13 N and 19 N



Part 3. – Problems

Level
+ components

* 1. a) b)] $\vec{R} = 72\ N, 36°\ jsq\ w$

* Check rubrics

5

Quiz - C5 - Momentum and Impulse #3.

1. a) $-6.7\ kg\frac{m}{s}$

   b) $-2.2 \times 10^{2}\ N$

2. $1.3 \times 10^{3}\ kg$

* 3. a) $1.75 \times 10^{3}\ kg\frac{m}{s}$

   b) $8.50 \times 10^{3}\ kg\frac{m}{s}$

   c) 30.0s

4. $-7.6\ m/s$

* 5. $\Delta v = 0.750\ m/s$

→ $m = 56.0\ kg$

→ $\vec{J} = +4.17 \times 10^{2}\ kg\,m/s$

→ $\Delta\vec{v} = ?$

$$\vec{J} = m\Delta\vec{v}$$

$$\vec{J} = m(\vec{v_f} - \vec{v_i})$$