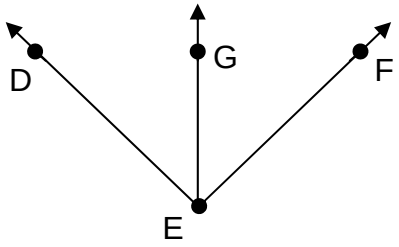
Name: Date: Period: Summer

Unit 1 BM Review A — Geometry

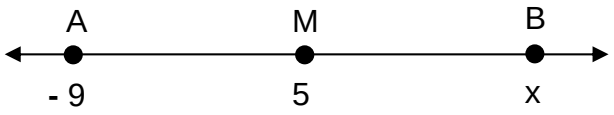
[G1.0] 1. Describe inductive reasoning.
[G1.0] 2. Describe deductive reasoning.
[G3.0] 3. Describe a counterexample to the statement: " Three points in a plane always determine a line."
[G3.0] 4. Describe a counterexample to the statement: " Two lines in a plane are always parallel."
[G1.0] 5. $\angle A$ and $\angle B$ are supplementary. $m\angle A = 2x + 6$ and $m\angle B = 3x + 4$. Solve for x.
[G1.0] 6. $\angle R$ and $\angle S$ are supplementary. $m\angle R = 8x + 17$ and $m\angle S = 2x - 7$. Solve for x.
[G1.0] 7. Bobby read the following statements:
$\angle 1$, $\angle 2$ are supplementary,
$\angle 2$, $\angle 3$ are supplementary.
What can Bobby conclude?
[G1.0] 8. Jill read the following statements:
If JK = PQ and PQ = ST.
What can Jill conclude? Name the property that she used.
[G16.0] 9. Do the following constructions:
a. Copy any angle
b. Bisect an acute angle
c. Bisect a segment
[G16.0] 10. Given an angle, what is the first step in constructing an angle bisector?
[G1.0] 11. Solve for x: In the figure (not drawn to scale), $\overrightarrow{EG}$ bisects $\angle DEF$, $m\angle DEG = 6x + 12$, and $M\angle FEG = 10x - 20$.



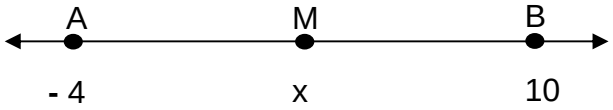
[G1.0] 12. Solve for x: In the figure (not drawn to scale), $\overrightarrow{EG}$ bisects $\angle DEF$, $m\angle DEG = 8x - 7$, and $M\angle FEG = 10x - 21$.

[G1.0] 13. List the three undefined terms of Geometry.

[G1.0] 14. If M is the midpoint of $\overline{AB}$, find the value of x.



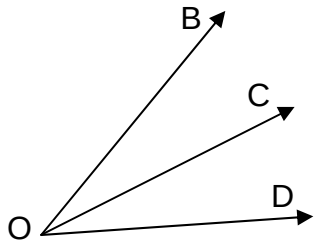
[G1.0] 15. If M is the midpoint of $\overline{AB}$, find the value of x.



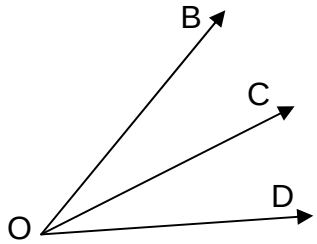
[G1.0] 16. Let Q be between P and R. Use the segment addition to solve for x.
PQ=5x - 23, QR= x+17, PR=24

[G1.0] 17. Let Q be between P and R. Use the segment addition to solve for x.
PQ=2x + 5, QR=25, PR=5x + 3

[G1.0] 18.$m\angle BOC = (2x + 9)$, $M\angle COD = (3x + 4)$, $M\angle BOD = 63$. Find $m\angle BOC$.



[G1.0] 19.$m\angle BOC = (x + 16)$, $M\angle COD = (2x - 1)$, $M\angle BOD = 45$. Find $m\angle COD$.



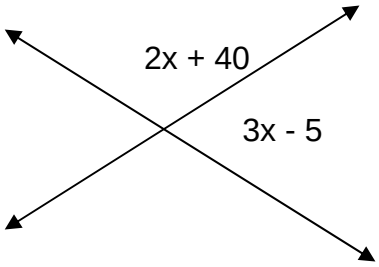
[G1.0] 20. If a right angle is bisected, the resulting angles are what kind of angles?

[G1.0] 21. If a straight angle is bisected, the resulting angles are what kind of angles?

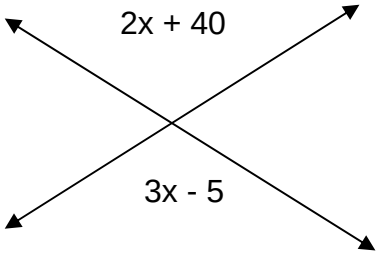
[G1.0] 22. Rewrite the statement in if-then form. " Sue goes to the movies on Fridays."

[G1.0] 22. Rewrite the statement in if-then form. " Bill mows the lawn on Saturdays."

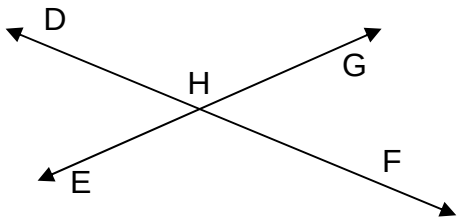
[G1.0] 23. Solve for x.



[G1.0] 24. Solve for x.



[G1.0] 25. List all linear pairs and vertical angles. If m∠GHF =66 then calculate the measure of the others.



[G1.0] 26. Give an example of the transitive property of equality.

[G1.0] 27. Give an example of the substitution property of equality.

[G1.0] 28. Give an example of the reflexive property of equality.