2025 TJSSA State Futurity
Genetic Evaluation Quiz
Intermediate Division

You have 60 minutes to complete this quiz. Questions 31 through 35 are tiebreaker questions. Further ties will be broken by order of finish.
For each question, choose the best answer.

ASA #: 2660685
Registered
SimAngus

KS MISS SEQUOIA Y770
Red
Polled (Homozygous Polled)

Tattoo: Y770
Left Ear

Single Birth Cow | 3/4 SM 1/4 AR | PQS GE

TraitTrac
(Check available results)

Owner: 283038 - CTN SIMMENTALS
Breeder: 127519 - KENNER, ERIKA JO

Birth Date: 2011-04-11
Original Issue: 2012-11-23

BOLT_GENOMIC - 2025-04-08

	CE	BW	WW	YW	ADG	DMI	MCE	MILK	MWW	STAY	DOC	CW	YG	MARB	BF	REA	SF	$GN	API	TI
EPD	7.9	4.2	74.3	106.4	0.2	0.83	5.2	30.2	67.3	15.9	13.8	17.5	-0.39	0.23	-0.057	0.88	-0.32	-0.036	112.8	71.2
PC	±3.4	±1.0	±6.2	±10.0	±0.01		±4.4	±7.0	±5.9	±4.5	±2.2	±9.7	±0.12	±0.12	±0.023	±0.21	±0.21			
ACC	0.57	0.66	0.62	0.61	0.61	0.35	0.44	0.41	0.51	0.36	0.56	0.50	0.41	0.52	0.43	0.50	0.17	0.38		
%	95	99	60	75	90	50	80	10	30	40	35	95	10	80	25	20		99	85	85

Pedigree

			Color	HPS
	HOOKS SHEAR FORCE 38K	CANSM - 684162 2081939	BH	PP
	HOOKS/KS SEQUOIA 35S	2334113	R	PP
	HOOKS NICOLE 15N	2214032		PP
KS MISS SEQUOIA Y770		2660685	R	PP
	REMINGTON RED LABEL HR	CANSM - 634702 2252968	R	PP
	ASR MS SUPER BALDY U851	2445081		PP
	PWA MISS RED LOGAN M216	USAAR - 859334 2459310		PP

For questions 1 through 6, use the information above.

1. This cow is registered as 3/4 Simmental. What makes up the remainder of her breed composition?
   a. Angus
   b. Maine-Anjou
   c. Red Angus
   d. Limousin

2. Which of this cow's EPDs is closest to breed average?
   a. DMI
   b. REA
   c. ADG
   d. BW

3. Which of the following statements about this cow's Parental Verification status is most accurate?
   a. She has been qualified through DNA to both her sire and dam.
   b. She has been qualified through DNA to only her sire.
   c. She has been qualified through DNA to only her dam.
   d. She has not been qualified through DNA to either of her parents.

4. If you were to successfully flush this donor to a heterozygous black bull, what percentage of the resulting calves would you expect to be red?
   a. 25%
   b. 50%
   c. 75%
   d. 100%

5. It is 67% likely that the true breeding value of this cow's BW EPD lies in what range?
   a. -1.0 to 1.0
   b. 3.7 to 4.7
   c. 3.2 to 5.2
   d. -4.2 to 4.2

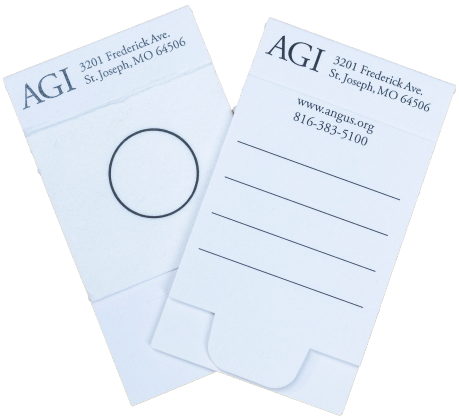
6. Your breeding program emphasizes producing its own replacement heifers. You have a young red cow with a MWW EPD of 60.2. How would you expect the daughters produced by this female to compare to hers?
   a. The daughters out of KS Miss Sequoia Y770 should have lighter adjusted weaning weights, on average.
   b. The daughters out of KS Miss Sequoia Y770 should have heavier adjusted weaning weights, on average.
   c. The daughters out of KS Miss Sequoia Y770 should produce calves with lighter adjusted weaning weights, on average.
   d. The daughters out of KS Miss Sequoia Y770 should produce calves with heavier adjusted weaning weights, on average.

7. Bull K240 has a YW EPD that ranks in the 20th percentile. Bull L3077 has a YW EPD that ranks in the 50th percentile. Assuming both bulls are Purebred Simmentals, which one should you expect to produce heavier offspring at 365 days of age, on average?
    a. Bull K240
    b. Bull L3077
    c. It depends upon the accuracies of their YW EPDs.
    d. It depends upon the ages of the cows they are used on.

8. If an animal is heterozygous for a certain trait, what is the term for the characteristic that does not appear in the phenotype?
    a. Recessive
    b. Transparent
    c. Carrier
    d. Inherited

9. Which of the following predicts the genetic potential of an animal's daughters?
    a. Direct EPD
    b. Economic Index
    c. Terminal EPD
    d. Maternal EPD

10. *Refer to the image to the right.*
Cards like these are used to submit what type of DNA sample?
    a. Saliva
    b. Follicles (tail hair)
    c. Tissue
    d. Blood



11. Who is the current chairman of the ASA Board of Trustees?
    a. AK Phillips
    b. Chris Ivie
    c. Victor Guerra
    d. Dr. Jon DeClerck

12. You have a herd of Simmental influenced cows. Your goal is to produce all black calves, as you think it will make them more marketable. What is the simplest way to achieve that goal?
    a. Test the color coat status of all of the cows and cull all of the red carriers.
    b. Utilize only homozygous black sires.
    c. Put embryos from black donor females into all of the cows that are red and/or have produced a red calf in the past.
    d. Purchase a black herd bull with a sire and dam that are also black.

13. In ASA's whole herd reporting program, what is the fall calving season?
    a. July through December
    b. August through December
    c. September through December
    d. October through December

14. What word has been federally trademarked by the American Simmental Association as a title for the popular Simmental x Angus composite cattle?
    a. SimSolutions™
    b. SimGenetics™
    c. SimAngus™
    d. SimSource™

15. Cow 308 and Cow 340 are both first-calf heifers. Cow 308's BW EPD has an accuracy of 0.44, and Cow 340's BW EPD has an accuracy of 0.28. What is the most likely explanation?
    a. Cow 308 came from a larger contemporary group.
    b. Cow 308 has multiple full siblings that have already produced calves.
    c. Cow 308 was flushed and her ET calves have been registered.
    d. Cow 308 has genomic enhanced EPDs.

16. In nearly every beef operation, what has the greatest impact on genetic progress?
    a. Embryo transfer
    b. Sire selection
    c. Genomic testing
    d. Data reporting

17. A producer plans to keep a high percentage of his heifer calves as replacements. If he wants to minimize their calving difficulties, which EPD should he emphasize when selecting the sires to produce these replacements?
    a. CE
    b. BW
    c. MCE
    d. $M

18. Which of the following statements about EPD accuracy is true?
    a. As the accuracy of an EPD increases, the possible change of that EPD also increases.
    b. EPDs with higher accuracy are less susceptible to significant change.
    c. Accuracy predicts the variation within an animal's calf crop. Higher accuracies indicate less variation.
    d. All of the above are true.

19. Which of the following statements about comparing EPDs across breeds is true?
    a. EPDs are specific to each breed association and cannot be used to directly compare animals from different breeds.
    b. Each breed association uses the same EPD averages, allowing animals to be directly compared using percentile ranks.
    c. In order to compare EPDs across breeds, the animals must be registered with multiple breed associations.
    d. Using an adjustment factor table published by BIF, EPD averages can be adjusted to zero for all breeds and then used to compare animals registered with different breed associations.

For questions 20 through 28, refer to the following sires. Information on these bulls can be found at the end of your quiz.
Each bull may be used as an answer more than once.

A. CDI/BDV Security 399M
B. KLER YFC Guardrail M44
C. Mid-Am New Heights 425M
D. W/C Heavy Hitter 733M

20. Which bull should you expect to produce the highest percentage of unassisted births when used on heifers?

21. Which bull should you expect to produce offspring that are the most profitable in a feedlot setting?

22. Which bull should you expect to sire offspring with the largest average ribeye area at 475 days of age?

23. Which bull should you expect to produce calves with the most favorable disposition scores?

24. Which bull should you expect to sire offspring with the highest ultrasounded IMF percentages, on average?

25. Compare the WW EPDs of Bull B and Bull D. Based on their current EPDs, how many more pounds of adjusted weaning weight should you expect Bull D to produce per calf, on average?
    a. 8.6 lbs.
    b. 17.0 lbs.
    c. 24.5 lbs.
    d. 70.0 lbs.

26. The possible change of Bull A's YG EPD is ±0.13. What does this mean?
    a. The likely true breeding value is within 0.13 points of its current value.
    b. This EPD ranks in the Top 13% of all registered Purebred Simmental sires.
    c. This EPD is 13% accurate.
    d. This EPD has changed by 0.13 points since the animal was initially registered.

27. How many of these bulls have Genomic Enhanced EPDs?
    a. 4
    b. 3
    c. 2
    d. 1

28. Which of the following statements is not true?
    a. Between Bulls A and B, Bull A should produce calves with heavier adjusted weaning weights.
    b. Between Bulls B and C, Bull B should produce terminal offspring with better USDA Yield Grades.
    c. Between Bulls C and D, Bull C should produce a higher percentage of unassisted births in his first-calving daughters.
    d. Between Bulls D and A, Bull D should produce a higher percentage of red calves.

29. You are studying a bull sale catalog that includes a vast amount of information on each lot. Of the following, which is the most reliable in predicting whether or not a bull is safe for use on heifers?
    a. Actual BW
    b. Adjusted BW
    c. BW EPD
    d. CE EPD

30. You recently purchased two yearling Simmental bulls to turn out with your herd. Bull M31 has a BW EPD of 0.6, and Bull M48 has a BW EPD of -0.6. Which of the following is true?
    a. You should expect M31 to sire calves with lighter average birth weights.
    b. You should expect M48 to sire calves with lighter average birth weights.
    c. You should expect the cows bred to M31 to calve earlier, on average.
    d. You should expect the cows bred to M45 to calve earlier, on average.

TIEBREAKER QUESTIONS

Questions 31 through 35 are tiebreaker questions only.

31. Ratios are most useful for comparing which of the following?
    a. Individual animals within a contemporary group
    b. Individual animals within a breed population
    c. Sire groups within a contemporary group
    d. Sire groups within a breed population

32. *Refer to the bulls you used to answer questions 20 through 28.*
    How many of these bulls are capable of producing heterozygous black offspring?
    a. 1
    b. 2
    c. 3
    d. 4

33. Which of the following trait pairs has a negative genetic correlation?
    a. Marbling and Ribeye Area
    b. Birth Weight and Weaning Weight
    c. Calving Ease and Stayability
    d. Milk Production and Calving Interval

34. In what year was the Texas Simmental Association founded?
    Note: It was renamed Texas Simmental/Simbrah Association fifteen years later.
    a. 1960
    b. 1970
    c. 1980
    d. 1990

35. Which of the following statements about the horned/polled trait is true?
    a. It is a polygenic trait in which the polled allele is dominant to the horned allele.
    b. It is a polygenic trait in which the horned allele is dominant to the polled allele.
    c. It is a simple recessive trait in which the polled allele is dominant to the horned allele.
    d. It is a simple recessive trait in which the horned allele is dominant to the polled allele.

ASA #: 4432169
Registered
AMERICAN SIMMENTAL

CDI/BDV SECURITY 399M

Black (Homozygous Black)
Polled (Homozygous Polled)

Tattoo: 399M
Left Ear

Frozen Embryo Bull | PB SM | PQB GE

TraitTrac
(Check available results)

Owner: 028998 - BEGGERS DIAMOND V RCH INC
Breeder: 202710 - C DIAMOND INC

Birth Date: 2024-04-01
Original Issue: 2025-03-11

BOLT_GENOMIC - 2025-04-08

	CE	BW	WW	YW	ADG	DMI	MCE	MILK	MWW	STAY	DOC	CW	YG	MARB	BF	REA	SF	$GN	API	TI
EPD	8.1	0.6	92.3	143.3	0.32	1.14	4.2	28.2	74.3	16.4	7.8	26.2	-0.24	0.61	-0.045	0.63	-0.34	0.044	161.5	100.1
PC	±4.5	±1.6	±9.1	±14.4	±0.02		±6.1	±9.8	±8.8	±4.8	±2.9	±11.4	±0.13	±0.16	±0.026	±0.26	±0.24			
ACC	0.42	0.46	0.44	0.44	0.44	0.33	0.23	0.18	0.27	0.33	0.43	0.41	0.33	0.40	0.34	0.39	0.02	0.37		
%	90	40	15	10	15	90	80	15	10	45	90	60	95	10	90	90		50	15	5

Pedigree

		Color	HPS
	HHS MR ENTOURAGE 867B 2941225	BB	PP
	LCDR RETRO 14K 4113752	BB	PP
	WS MISS SUGAR C4 2974794	BB	PP
CDI/BDV SECURITY 399M	4432169	BB	PP
	CDI JOURNEY 224Y 2641407	B	PP
	CDI MS JOURNEY 73B 2853079	BB	PP
	CDI MS SHARPER IMAGE 22Z 2797786	BB	P

ASA #: 4381421
Registered
AMERICAN SIMMENTAL

KLER YFC GUARDRAIL M44

Black (Homozygous Black)
Polled (Homozygous Polled)

Tattoo: M44
Left Ear

Single Birth Bull | PB SM | PQB GE

TraitTrac
(Check available results)

Owner: 222422 - K-LER CATTLE CO
Breeder: 222422 - K-LER CATTLE CO

Birth Date: 2024-01-14
Original Issue: 2025-02-24

BOLT_GENOMIC - 2025-04-08

	CE	BW	WW	YW	ADG	DMI	MCE	MILK	MWW	STAY	DOC	CW	YG	MARB	BF	REA	$GN	API	TI
EPD	14.7	-1.2	71.5	106.4	0.22	0.39	7.6	22.7	58.3	16.8	12.5	16.0	-0.44	0.18	-0.085	0.79	0.034	142.3	80.0
PC	±4.4	±1.5	±8.8	±13.6	±0.01		±6.2	±10.0	±9.0	±4.9	±2.9	±11.6	±0.14	±0.16	±0.026	±0.27			
ACC	0.44	0.49	0.46	0.47	0.47	0.31	0.22	0.16	0.26	0.31	0.42	0.40	0.32	0.38	0.34	0.37	0.34		
%	15	15	80	75	70	25	25	55	70	40	45	90	25	55	30	65	65	40	55

Pedigree

		Color	HPS
	LLSF VANTAGE POINT F398 3492381	BH	PP
	CLRWTR CLEAR ADVANTAGE H4G 3858588	BB	PP
	WS MISS SUGAR C4 2974794	BB	PP
KLER YFC GUARDRAIL M44	4381421	BB	PP
	WS REVIVAL *CANSM - 1167913* 2913874	BB	PP
	KLER BARBIES STAR 972G 3582381	BB	PP
	K-LER BARBIE 455B 2953254	BB	PP

ASA #: 4403206
Registered
AMERICAN SIMMENTAL

MID-AM NEW HEIGHTS 425M

Black (Homozygous Black)
Polled (Homozygous Polled)

Tattoo: 425M
Left Ear

Single Birth Bull | PB SM | PQB GE

TraitTrac
(Check available results)

Owner: 230280 - SCHNABEL RANCH
Breeder: 268457 - MID-AM GENETICS

Birth Date: 2024-01-01
Original Issue: 2025-03-04

BOLT_GENOMIC - 2025-04-08

	CE	BW	WW	YW	ADG	DMI	MCE	MILK	MWW	STAY	DOC	CW	YG	MARB	BF	REA	SF	$GN	API	TI
EPD	14.0	-2.1	92.7	138.2	0.28	0.76	4.2	26.7	73.0	19.9	14.6	29.7	-0.26	0.26	-0.012	0.98	-0.36	0.084	160.8	95.2
PC	±4.2	±1.5	±8.6	±13.4	±0.01		±5.7	±9.0	±8.2	±4.5	±2.8	±11.0	±0.13	±0.15	±0.025	±0.25	±0.23			
ACC	0.46	0.49	0.47	0.48	0.48	0.33	0.28	0.24	0.32	0.37	0.45	0.43	0.35	0.42	0.38	0.41	0.07	0.39		
%	20	10	15	15	30	60	80	25	10	10	20	50	90	40	99	25		15	15	15

Pedigree

		Color	HPS
	HOOK`S BLACK HAWK 50B 2854467	BB	PP
	HOOK`S EAGLE 6E *USAAR - 4539337* 3253742	BB	PP
	HOOK`S CRYSTAL 1C 3013438	BB	PP
MID-AM NEW HEIGHTS 425M	4403206	BB	PP
	W/C EXECUTIVE ORDER 8543B 2900283	BH	PP
	MID-AM RESTLESS HEART 3452823	BB	PP
	SFI/GPAR LUVS TO DREAM 2764987	BH	PP

ASA #: 4442162
Registered
AMERICAN SIMMENTAL

W/C HEAVY HITTER 733M

Black (Heterozygous Black)
Polled (Homozygous Polled)

Tattoo: 733M
Left Ear

Frozen Embryo Bull | PB SM | PQB GE

TraitTrac
(Check available results)

Owner: 003773 - WERNING, DALE
Breeder: 003773 - WERNING, DALE

Birth Date: 2024-01-12
Original Issue: 2024-12-30

BOLT_GENOMIC - 2025-04-08

	CE	BW	WW	YW	ADG	DMI	MCE	MILK	MWW	STAY	DOC	CW	YG	MARB	BF	REA	SF	$GN	API	TI
EPD	13.3	-0.9	96.0	145.0	0.31	1.06	6.8	27.4	75.3	14.2	18.0	41.0	-0.45	0.07	-0.067	1.29	-0.36	0.054	139.0	92.2
PC	±4.6	±1.6	±8.6	±13.4	±0.01		±6.1	±10.0	±9.0	±4.8	±2.9	±11.4	±0.14	±0.16	±0.027	±0.26	±0.24			
ACC	0.41	0.46	0.47	0.48	0.48	0.31	0.23	0.16	0.26	0.33	0.43	0.41	0.32	0.38	0.33	0.39	0.02	0.35		
%	30	20	10	10	15	85	35	20	10	65	2	20	25	75	65	2		40	45	20

Pedigree

			Color	HPS
	LCDR IMPACT 134F	3491039	BB	PP
RFS HEAVY HITTER H45		3782005	BB	PP
	BCLR MISS BALDY E704	3322997	BH	PP
W/C HEAVY HITTER 733M		4442162	**BH**	**PP**
	MR SR 71 RIGHT NOW E1538 *CANSM - 1323080*	3325668	BB	PP
W/C MISS WERNING 971G		3729677	B	PP
	W/C MISS WERNING 757E	3479603	B	PP